

With the Medical Officer of Health's Compliments.

Eustbourne.



### BOROUGH OF EASTBOURNE.



## ANNUAL REPORT

FOR 1905 ON THE

# health of Eastbourne,

:: Vital Statistics, :: Sanitary Work, Etc.

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DIPLOMATE IN PUBLIC HEALTH OF CAMBRIDGE UNIVERSITY;

Medical Officer of Health.

### EASTBOURNE:

Printed by V. T. SUMFIELD, STATION STREET,

# SANITARY DEPARTMENT, 1905.

### SANITARY COMMITTEE, 1904-5.

Mr. Councillor O'BRIEN HARDING, J.P., Chairman.

The Mayor (Mr. Councillor Simmons, J.P.).

Mr. Alderman M. Martin, Deputy-Chairman.

Mr. Alderman Rowe. Mr. Councillor Climpson.

", ", Welch. ", Hollins.

", Councillor Bradford. ", Rawles.

", Breach. " White.

### 1905-6.

Mr. Alderman Martin, Chairman.

The Mayor (Mr. Councillor Fox, J.P.).

Mr. Alderman Rowe, Deputy-Chairman.

Mr. Alderman Welch. Mr. Councillor Harding, J.P., Councillor Bradford. ,, Hollins ,, Breach. ,, Knight. ,, Climpson. ,, White.

### STAFF.

Medical Officer of Health:
W. G. Willoughby, M.D., Lond., D.P.H.

### Sanitary Inspectors:

E. G. Spears, C.S.I. (East Ward) (L.G.B.) (Chief).
J. H. Ollett, A.S.I., R.P.C. (West and Central Wards).
S. R. Henderson, C.S.I. (St. Mary's Ward).

### Meteorologist :

S. R. HENDERSON, C.S.I.

### Clerks:

R. PIERCE and C. CONNELL.

Dust Foreman: Assistant Disinfector, etc.:
G. Green. R. Gay.

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# BOROUGH OF EASTBOURNE

SITUATION.—Latitude, 50° 46′ N.; Longitude, 0° 17′ E.

ELEVATION OF THE AREA BUILT OVER.—Varies from 140 feet above (at West End) to 4 feet below high-water mark (in the East of the Borough).

SLOPE.—From West to East. ASPECT.—South and South-East.

Area.—Of the Borough, 5,378 Acres; of the part built over, about 2,000 acres.

Density of Population.—For the Borough, 8.6 persons per acre; for the Town, about 45.

No. of Inhabited Houses.—At Census (April, 1891), 5,190; at Census of 1901, 7,088.

Population.—Census (1891), 34,960; Census (1901), 43,344; Estimated at the middle of 1905, 46,500.

RATEABLE VALUE.—£398,401 15s. od.

Birth-rate.—18.34 per 1,000; Males, 457; Females, 396.

DEATH-RATES.—Including all deaths, 11'22; excluding deaths of visitors, 9'1 per 1,000.

Zymotic (total), 0.94; from the seven principal Zymotic diseases, 0.4 per 1,000.

Infantile Mortality, 102 per 1,000 births.

MEAN ANNUAL TEMPERATURE.—50.4 degrees Fahr.

Hours of Bright Sunshine Recorded.—1680'2.

TOTAL RAINFALL.—30'10 inches.

To His Worship the Mayor, and to the Aldermen and Councillors of the Borough of Eastbourne.

GENTLEMEN,

In accordance with Section XIV. of the Local Government Board Order as to the duties of the Medical Officer of Health, I have the honour of submitting herewith my Twelfth Annual Report on the Health of Eastbourne, its Vital Statistics, the Sanitary Work done, etc., during the year 1905.

I have also, in accordance with Section 132 of the Factory and Workshops Act, 1901, to submit a special report on the work done under the Factory and Workshops Acts. This is incorporated with the following report under the division of Sanitary Work. The Register of Workshops, which has to be kept by the Authority, is duly kept in my department.

This year an additional form on causes of infantile mortality has been filled for the Local Government Board, and a copy is included with the others in the Appendix.

In accordance with instructions also, copies of this Report have been sent to the Home Office, to the Local Government Board and to the County Council.

The Report is, as usual, on the lines of my previous reports so that comparison and reference may be easy. What repetition there is of matters previously detailed is necessary so that each year's report shall be complete in itself.

The birth-rate for Eastbourne for 1905, like that of the Country generally, is the lowest recorded, and shews a particularly large drop from that of any preceding year.

The Zymotic death-rate for the Borough in 1905 is the smallest ever recorded in Eastbourne, viz.: 0.4 per 1,000, or only one-quarter that for the whole country.

The number of cases of notified infectious disease was the third from the lowest recorded, and over ninety-four per cent. of the cases of the principal diseases were treated at the Sanatorium, where the death-rate was but 2.8 per cent.—the lowest since the Institution was opened.

While not able this year to report the lowest recorded death-rate for the Borough, the inclusive rate, viz., 11'22 per 1,000 is satisfactory, and below the 10 years average. The residents' rate of 9'1 per 1,000, i.e., excluding the deaths of visitors, is the lowest on record except for the record rate of 1897.

Compared with England and Wales, whose death-rate in 1905 was by much the lowest ever recorded, Eastbourne's rate is four per 1,000 better, i.e., a comparative saving in a population of 46,500, of 186 lives. This is as it should be considering Eastbourne's advantages and lower birth-rate, but the satisfactory comparison not only applies to England generally but also to the rate in England's 141 smaller towns (3.2 per 1,000 larger than Eastbourne's rate) and to that in country districts (3.7 per 1,000 larger than Eastbourne's rate).

Infantile mortality was below the average and well below that for England and Wales, but not below what it should be in Eastbourne. A noticeable feature in 1905 was the continued decreasing, almost to vanishing point now, of infantile mortality from diarrhœa. With every fresh step of the Authority in the frequency and thoroughness of dealing with house refuse and similar accumulations this coincident diminution of infantile deaths has occurred. One may fairly claim that these low sickness and death-rates recorded year after year justify the Sanitary Authority's record for energy in sanitation, and particularly house sanitation,

Deaths from Consumption shewed a slight increase in 1905, but Eastbourne's rate is still below that of the country in spite of deaths of visitors. It is very much below that of places celebrated for "Consumptives," which Eastbourne fortunately is not. The only important preventive measure that Eastbourne lacks is a Sanatorium.

As in the rest of the country deaths from Cancer are on the increase, and the disease is not yet being dealt with much by Sanitary Authorities, pending results of the extensive researches going on in London and elsewhere.

Details of the various diseases from which deaths occur in Eastbourne are given in the body of the Report, and there is nothing special in any of them to make it necessary to allude here to any but the foregoing.

I have submitted no details as to my work as Medical Officer to the Education Authority. It is constant and varied, and is difficult to tabulate in any way. Examination of the vision of over two hundred children, with complete atropine examination of about fifty of them and provision of spectacles, has been an important part of the work. Personal visits to every child physically and mentally defective, with a view to establishment of separate classes, has been another important duty in 1905, and in almost every branch of the work the duties are so mingled with that of a Medical Officer of Health that it is difficult to separate them in a Borough of the size of Eastbourne. Time does not permit, however, for all the work that might be done in this direction.

In carrying out the duties of my office, I have been continually indebted to the Medical profession in Eastbourne for kind assistance. I have also to particularly thank the members of the Staff of the Department, as in previons years, for the ready assistance I have always had from them,

I sincerely thank the members of the Sanitary Authority and particularly those on the Sanitary Committee, for their kindness throughout the year.

I am, Gentlemen,

Your obedient Servant,
W. G. WILLOUGHBY, M.D., LOND.



### THE BOROUGH.

THE Borough of Eastbourne is formed by the original civil parish of Eastbourne and the district of Norway, which was formerly part of the original parish of Willingdon. In the official census reports of 1901 the acreage is given as follows:—

Land	 •••	•••	5	,362	acres
Inland Water	 •••	•••	•••	16	,,
Tidal Water	 	•••	•••	0	,,
Foreshore	 		•••	332	,,

The name "Eastbourne" throughout this report refers to the Municipal Borough, and the statistics given apply to the Borough, and not to the original parish alone or to the registration district of that name as mentioned in the Registrar-General's reports.

A large portion of the Borough, especially on the West and North, consists of agricultural and other land not occupied by houses. Of the total 5,362 acres of land about two-thirds are not built upon, but surround the town. The area built upon is surrounded by agricultural land or sea in all directions, and the buildings do not extend to the Borough boundaries except towards the sea.

The Borough is divided into four Wards and into nine Ecclesiastical Sub-Districts, as follows:—

WARDS.—East, Central, West, and St. Mary's.

ECCLESIASTICAL PARISHES.—St. Mary's, St. John's, All Saints', St. Saviour's, St. Peter's, Holy Trinity, All Souls', St. Anne's, and Christ Church.

The census populations of the Parishes varied from

13,660 in Christ Church to 354 in St. Peter's, and that of the Wards varied from 16,836 in the East Ward to 6,101 in the West Ward.

The Parishes, owing to extreme variety of population, area, and other circumstances, are of no use as units in vital statistics or in forming sanitary districts under Inspectors, and the division into Wards, therefore, is the division of the Borough followed in this Report. In 1902 a fourth Sanitary Inspector was appointed, principally to deal with the new duties put on to the Sanitary Department as regards factories and workshops. On the resignation of Mr. C. H. Taylor in 1904 the Council decided that for the time the vacancy should not be filled, as the Factory and Workshop duties had been got into routine order and were in the hands of the Medical Officer of Health and each Inspector in his district. For the latter part of the year, therefore, we have reverted to the old arrangement of three districts, in each of which, under the Medical Officer of Health, an Inspector has full charge in all respects, including the removal of and dealing with cases of infectious disease, the working of the Sale of Food and Drugs Acts, etc.

The three sanitary districts are:—

- The East Ward (population, 18,601).—Mr. E. G. Spears, Sanitary Inspector.
- 2. The West and Central Wards (population, 6,367 and 9,829 respectively).—Mr. J. H. Ollett, Sanitary Inspector.
- 3. The St. Mary's Ward (population, 11,703).—Mr. S. H. Henderson, Sanitary Inspector and Meteorologist.

Though the Wards are of unequal population and area, the character of the duties varies and makes a proper balance of work. The number of households and other items in each district are as important as population and area, and the work as at present arranged is fairly distributed and there is more than enough for the full energies of one Inspector in each district.

In the West Ward, with its upper-class population and large houses, drainage work and the niceities of house sanitation form a large part of the duties. In the East Ward the greatest opportunities occur for doing work thoroughly which will conduce to the saving of life and illness. Small and full houses, small shops, etc., require much attention, and a large birth-rate with a large population of children make the Ward the most important from a sanitary point of view. In St. Mary's Ward there is a variety of work, there being both an artizan district and a district of large houses. The Inspector for St. Mary's Ward has also to attend to the Meteorology of the Borough.

The Vital Statistics in this Report are given as a whole, and as regards the old division into Wards.

The principal institutions, from a sanitary point of view, are the following:—

The Borough Infectious Diseases Hospital in St. Mary's Ward.

The Isolation Cottage in the East Ward.

The Union Workhouse and Infirmary in St. Mary's Ward.

All Saints' Convalescent Home in the West Ward.

The Princess Alice Hospital in St. Mary's Ward.

Other institutions are the Upwick Vale Home, the Homœopathic Cottage Hospital, and Convalescent Home.

Just beyond the Borough boundary in the East is the Languey Hospital for Small Pox, which, although outside the Borough, belongs to the Eastbourne Sanitary Authority.

### Site, Soil, etc.

The Borough is situate on and at the foot of a slope running chiefly from the Downs on the West to the level ground at the East end of the South Downs. The highest point of the Borough on the Downs is about 590 feet above sea level, but the elevation of the portion covered by houses varies from about 150 feet above, in the West, to 4 feet below high-water mark in the East. The Downs shelter the town from the West and South-West, the latter being the direction of most of the storms or gales. The front of the town is open to the sea facing South and South-East, and this ensures a very large amount of sunshine, as is shewn by the sunshine record.

One of the most satisfactory characteristics of Eastbourne is the large extent of the Borough and of the area built over compared with the number of its houses and population. The large extent and number of open spaces and gardens conduce to its healthiness. The earlier estates that were laid out might be more perfectly followed out by the later than they are, to the advantage of the Borough.

Geologically there is much variation in the soil in the different parts of the Borough. Eastbourne is for the greater part on chalk. There is a certain amount of clay soil in the central part of the town, and a strip of upper greensand, which is narrow along the Grand Parade and widens as it passes from West to East to about Bourne Street, where it narrows again until it ends about half-a-mile east of the Pier. The remainder of Eastbourne in the East is on alluvium and on the beach.

Of the four Wards, the whole of the West Ward, and, with a small exception adjoining the railway, the whole of St. Mary's Ward are on chalk; the East Ward is to a small extent on chalk and greensand, but mainly on alluvium and shingle; the Central Ward is on chalk principally, but also on alluvium, and, to some extent, on greensand and clay.

In the valleys the chalk and greensand are covered by valley gravel.

### Meteorology.

In the Meteorological Department important changes have taken place. The superintendence remains as before in my hands, and Mr. Henderson has been appointed Meteorologist in the place of Mr. Sheward, who resigned at the end of September. For some time past two of the Sanitary Inspectors, Mr. Taylor (before his resignation) and Mr. Henderson had done most of the work, though Mr. Sheward did as much as his failing health would allow. The Authority has kindly granted Mr. Sheward an appointment as "Consulting Meteorologist" at £1 per week. The appointment of Mr. Henderson, already a Sanitary Inspector, thus reduces the staff and expense of the Department in accordance with the wish of the Council.

The Meteorology of the Borough for 1905 will be recorded in Mr. Henderson's Annual Report, where full details can be obtained. Some of the *data* have been arranged in a table in the Appendix to this Report, where a coloured chart is also given, showing in a graphic manner some of the principal meteorological items and the deaths, daily and week by week respectively.

Among the facts shewn in this chart and the tables are the following:—

Rainfall for the year, 30 10 inches. Number of days on which rain fell, 169 Highest recorded barometric reading, 30 963 inches on 20th January, at 9 a.m.

Lowest ditto, 28.864 on 13th November, at 9 a.m. Highest recorded temperature in the shade, 77 degrees on 21st July.

Lowest ditto, 22 degrees on January 2nd. Total amount of sunshine, 16,802 hours.

Number of sunless days, 66.

In 1905 the temperature was over 75° in the shade on 1 day and below 32° on 8 days.

The meteorological report compares these figures with the averages. As compared with 1904, there were 1.74 inches more rainfall and six more rainy days. There were six fewer sunless days and 81 less hours of sunshine. Diarrhœa, the disease most closely correlated with high summer temperatures was conspicuous by its comparative absence in 1905 in spite of the summer being a warm and dry one.

The instruments are just as in previous reports, but have required various repairs during the year. In October the instruments were examined by an Inspector from the Meteorological Office, and, acting on his advice, a new 5-inch Snowdon Rain-guage was obtained in November.

The station is kept in close touch with the Meteorological Office. Reports are circulated among the members of the Committee monthly and are daily posted in the shelters and at the Queen's Hotel. Daily telegrams are sent to leading papers and also weekly reports.

Some recording instruments would make the station-more complete and more practically useful.

The Grand Hotel Company and the Pier Company kindly permit us to keep sunshine recorders on their premises; that on the Pier being fixed for supplementary observations.

### Water Supply.

The water supply of Eastbourne is obtained from deep wells in the chalk, but the water obtained is remarkably soft for chalk water, and, as I shewed by figures in my last Annual Report, the hardest Eastbourne water is as soft or softer than any of the softest London waters, whether derived from the Lee or the Thames or deep wells.

The main supply of Eastbourne is from Friston and Charleston on the Downs, long headings, over a mile in length, connecting the two places; the pumping takes place at Friston. Very nearly the whole of the water came from this source during 1905.

The Water Company has, however, two subsidiary sources, namely, Holywell and Wannock. For a short period in the summer some water from Wannock was used as well as that from Friston. The water at Bedfordwell, the old source, has not been used for some years past.

There has always been a constant supply at good pressure in the main throughout the year, and the quantity has never, even at the driest times, been limited.

The organic purity of the water is unimpeachable, and the freedom from possibility of contamination of a source of water supply being infinitely of more importance than a single good result on analysis, it is reassuring to note how free from possibility of contamination the sources of the Eastbourne supply are.

Analyses of water are made constantly, full reports being received at least once a month; partial analyses are made weekly.

In my last Report I dealt fully with suggestions as to artificial softening and gave reasons why as regards our water supply this is quite unnecessary.

For the purposes of advertising mineral and table waters most absurd statements are sometimes made concerning the hardness of the waters of places on or near the South Coast, including Eastbourne. In a circular issued during 1905, advertising a certain table water, these statements were freely circulated to the detriment of the towns concerned, stretching from the West of Sussex far into Kent.

I have no hesitation in saying it is far safer to drink the untreated water of any of the towns referred to than most of the much-handled table waters which are so freely sold to credulous customers. In nine hundred and ninety-nine cases out of a thousand the pure, natural, general supplies are

best; in the thousandth case it is possible that under medical orders a special water is useful.

I wrote in my last Report that many analyses have been made of such waters as Vichy, etc., the various table waters such as soda, potass, lithia, etc., and they invariably contain far more salts and hardness than the Eastbourne water or the water of the other places mentioned.

The amount of water pumped into Eastbourne for consumption from the various sources varied from  $17\frac{1}{2}$  million gallons per week down to ten million gallons, the average amount being  $12\frac{1}{2}$  million gallons per week. This, allowing for houses supplied in outlying districts, gives over 35 gallons per head per day. More could have been pumped in if necessary. I am indebted for this and other information to the Manager of the Eastbourne Waterworks in Eastbourne, viz., Mr. A. J. Howard.

It is notable that the quantity and excellent quality of the water are practically identical with those of other years of varying rainfall. Sources independent as far as possible of variations in amount of rainfall are most satisfactory.

I submit a typical analysis of Eastbourne water, the samples being taken in the summer and reported on by Professor Frankland. Mr. Wynter Blyth's (Borough Analyst's) reports give similar results.

### CHEMICAL LABORATORIES,

THE UNIVERSITY,

BIRMINGHAM,

17th July, 1905.

DEAR SIR,

### EASTBOURNE WATER.

I have to report to you on the chemical analyses which I have made of the several samples of water sent to me from Eastbourne during the present month. The samples were collected on the 5th and 7th inst. respectively.

The samples representing the supply to the town and taken from the high and low service mains respectively were clear, palatable, of an extremely high degree of organic purity, and of only moderate hardness.

Thus in all respects they were of most excellent quality for domestic purposes.

The sample from the Friston Well was clear and contained the same proportions of nitrates and chlorides as were present in the samples from the service mains.

I am,

Faithfully yours,

(Signed) PERCY F. FRANKLAND.

RESULTS OF ANALYSIS EXPRESSED IN PARTS PER 100,000.

,			
	Remarks.	Clear, palatable, free	from poison- ous metals.
	Total.	50	80
Hardness.	Tem- porary, manent. Total.	5.4	5.3
	Tem- porary.	14.6	14.7
	Chlorine.	3.40	3.40
Total	combined Nitrogen.	.354	.348
Nitrogen	Nitrates and Nitrites.	.347	.341
	Ammonia	0	0
	id Organic Organic Ammonia Nitrates combined Chlorine. Transcriptor. Anitrogen. Nitrogen. Nitrites.	200.	<i>L</i> 00.
	Organic Carbon.	£20.	920.
Total	solid Matters.	28.	58.00
	Description.	High service main, July 5, 1905	Low service main, July 5, 1905

(Signed) PERCY F. FRANKLAND, Ph.D., M.Sc., LL.D., F.R.S.

July 17th, 1905.

### Drainage.

Drainage and re-drainage work has been constantly on hand during the year, and some of the work is described later in this Report in the part devoted to "Sanitary Work."

The whole of the sewage, except that from the Infectious Diseases Hospital and some surface water, passes into the sea untreated at Langney Point. Owing to the levels of a portion of the Borough, the fall is only natural at low tide; at high tide some of the sewage has to be lifted by the aid of Shone's Pneumatic Ejectors. Langney Point is so placed that the sewage does not return to the foreshore of the Borough.

In two parts of the town the sewage has to be raised to the level of the main sewers by pneumatic ejectors—viz., in Compton Street and in Bourne Street. The system works very well.

There are one or two outfalls on the sea front for storm water.

Infectious excrementitious matter at the Infectious Diseases Hospital is destroyed by cremation, and as there are but very few cases except those in the Hospital, fouling of the shore in the neighbourhood of the outfall, if it occurred, would not easily convey specific infectious illnesses, if at all.

The drainage of the adjoining district of Willingdon has received much attention during the year, and seems to be working more satisfactorily. The land used, as I stated in my evidence at the local enquiry, is poor land for such a purpose as irrigation. What concerns Eastbourne is that the effluent should be pure, for that comes eventually into the Borough.

### House Refuse.

House and garden refuse is collected by the Corporation, under the organization of the Medical Officer of Health. It is burnt at the Destructor.

Fortunately the contractor who still had a small area of the Borough to collect from, gave this up early in 1905, and the whole district is now scavenged by the Corporation, with a great improvement in efficiency and decrease in illness. Collection of refuse takes place once weekly during nine months of the year and twice weekly in July, August and September; this has gone on now since and including 1899.

It is often said that large houses should have a more frequent collection of refuse than small, but this is not so as far as health is concerned. Occupants of large houses can better deal with the refuse than those of small, and it is of urgent importance for health that accumulations of rubbish should be got away from the neighbourhood of any houses as soon as possible.

An attempt to find a satisfactory form of motor dust cart during the year failed, and the present unsatisfactory type of collecting cart has still to be used.

### Population.

The distance from the census has now increased so much that the estimate of the population is difficult to make correctly, but by comparing the results obtained from different processes a fairly accurate estimate can be obtained. The statistics in this Report are based on the estimate that in the middle of 1905 the population numbered 46,500. If, however, the population has increased since the census of 1901 as it did between 1891 and 1901, then the population of 1905 was 47,600. The Registrar-General gives his estimate of the By calculations based on former population as 47,078. increases, on excess of births over deaths, and on the number of inhabited houses, however, I arrive at 46,500 as the best approximate estimate. The population is not growing so quickly as it did—the excess of births over deaths is smaller, owing to the diminishing birth-rate—and the temporary dulness in the building trade, which is one of the staple businesses of Eastbourne, employing at the time of the last census 2,441 males, still continues. The houses built in 1905 were, just as in 1904, only about half the number of those built in the census year, and the employés must have accordingly dropped in number, but not to a corresponding extent.

Although Eastbourne is not growing as rapidly as it did it is still increasing, and in 1905 the excess of births over deaths was 331, a smaller number, however, than in previous years. In the later years of the old century in Eastbourne, the excess of immigration over emigration used to be twice this birth excess.

The distribution of the population according to Wards is shewn in the subjoined table. The 1905 estimate is approximate and based principally on the increase in the number of dwelling-houses and the excess of births in each locality.

Wards.	P	opulation in 18 (Census).	891	Population in (Census).	1901	Population in 1905 (Estimate).
East		12113		`16836		` 18601
Central		10501		9655	•••	9829
West		5736*	•••	6101	•••	6267
St. Mary	's	6619*	•••	10752	•••	11703
Totals		34969		43344		46500

<sup>\*</sup>Incorrect.—Some of the St. Mary's Ward population was at this census included with the West.

### SEX CONSTITUTION OF THE POPULATION.

The last census showed that the percentage of males is now nearly stationary, and not decreasing at the rapid rate the previous census showed:—

Year.	Males, Total.	Per- centage.	Females, Total.	Per- centage.	Total.	Excess of Females.
1881 (census) 1891 (census) 1901 (census) 1905 (estimate)	10,060 14,665 18,097 19,390	45.7 41.9 41.8 41.7	11,954 20,304 25,247 27,110	54'3 58'1 58'3	22,014 34,969 43,344 46,500	1,894 5,639 7,150 7,720

Calculated to the middle of 1905 there are probably 7720 more females than males in Eastbourne.

In Eastbourne, as in other similar health resorts, there are fewer occupations and means of obtaining livelihood for men than for women, hence one cause of the large disproportion in the number of the sexes.

In Eastbourne there are more female infants under one year than male, but at age one males preponderate, and do so up to the age of fourteen, when females preponderate to the close of life. The difference is most excessive at the ages 20-30, when the females are nearly twice as numerous as the males; the difference decreases slowly to the age of fifty, and then, though females exceed males there is not much difference to the close of life.

### AGE CONSTITUTION OF EASTBOURNE POPULATION.

The following table gives the 1901 (census) and 1905 (middle, estimated) age groups of the population according to sexes:—

		C	Census, 1901.			Estimate, 1905.			
Age Groups.		Males.	Females	Total.	Males.	Females	Total.		
о—і		392	406	798	420	436	856		
1-5		1537	1502	3039	1647	1613	3260		
Total under 5		1929	1908	3837	2067	2049	4116		
5—15		4383	4100	8483	4696	4403	9099		
15—25		3533	6114	9647	3785	6565	10350		
25—65		7434	11906	19340	7965	12784	20749		
65 and upwards		818	1219	2037	877	1309	2186		
Totals	•••	18097	25247	43344	19390	27110	46500		

Since the census of 1891 the main change in the arrangement of the Eastbourne population's ages has been that there are now about three per cent. less of the ages between 1 and 15 and three per cent. more at ages from 25 to 65.

The percentage composition of the population of Eastbourne at different groups of ages is as in the following table:—

Ago Gr	oung		Census, 1891.	Census, 1901.				
Age Gr	oups.		Total.	Total.	Males.	Females.		
Under 5 years of	age		 10'02	8.82	10.66	7.26		
5—15	•••		 21.10	19.27	24'22	16.54		
15—25			 22.00	22.56	19.22	24.51		
2565	•••	•••	 41.63	44.62	41.08	47.16		
65 and upwards	•••	•••	 4*24	4.40	4.25	4.83		

In a previous Report I gave in detail the occupations of the population. Of 14,134 males over 10, 10,709 were engaged in some occupation, the principal being building and its allies employing 2,441, food and lodging 1,473, conveyance of man, goods and messages, 1,440. Of 8,843 females engaged in occupation 3,771 were domestic servants, excluding 672 in laundry service. In 1904 and 1905 there must have been a decrease in those engaged in building trades.

### HOUSING OF THE POPULATION.

The following table shews the number of dwelling houses in Eastbourne and in each Ward at the census of 1891 and 1901, also the number of persons per house and the number of dwelling-houses recently certified:—

Wards.		ises inhabited Census, 1901.		rsons per hou: Census, 1901.		Houses certifi	ed	Houses certified from Census to end of 1905.
East		2,970		5.6		58		576
Central		1,555		6.3	• • •	12		56
West		643		9.4	•••	21		87
St. Mary	y's	1,920	•••	5.6	•••	74		415
		7,088		6.1 ——		-6=		
		7,000		<del></del>		165 —-		1,134

In previous Reports I have detailed particulars of the housing of the people of Eastbourne. The population in recent years has spread over many more houses, and, as shewn by the last census, the number of persons per house has diminished. Lodgers have to be taken in by many owing to the rents of houses, but overcrowding in Eastbourne is very small in extent.

The population density in the Borough as a whole in 1905 was 8.6 persons per acre; in the part of the Borough built over it was approximately 45 persons per acre.

The statement that the density of the population in the Borough is but 8.6 persons per acre must be taken with the supplement just given—viz., that the real density is about 45, which is still comparatively small. To the advantage of the health of the population the houses are mostly surrounded and intersected by open spaces. The newer estates have not, unfortunately, been laid out so healthily in this respect as in former days. The check in house building of 1904 continued in 1905, 165 houses being certified for occupation as against 166 in 1904, 281 in 1903, 325 in 1902, 254 in 1901, and 293 in 1900, excluding stables, warehouses, etc. The last census showed that the population has spread over more houses of late years, there being less persons per house, viz., 6.1 at the 1901 census, and 6.7 at the 1891 census.

Building is still being carried on mainly in the East and in St. Mary's Wards. The sites in St. Mary's Ward, being

<sup>†</sup> From figures extracted from books kindly lent by Mr. Field, Borough Architect and Building Surveyor.

chalk and at a good elevation, are satisfactory, and this Ward in 1905 had a greater increase in houses than any other. The sites in the East Ward are not so satisfactory, as they require so much filling in and raising. The excellent Bye-law to the effect that all sites shall be raised to the level of high-water mark at least is in satisfactory use.



### MARRIAGES.

The number of marriages recorded in the Borough during 1905 was 273, equal to a rate of 11.87 per 1,000 persons living.

The following table gives rates in previous years in Eastbourne and compares them with England and Wales:—

Υe	ear.		No. of Marriages.	Rate per 1,000 living.	Rate for England and Wales.
1895			238	12.58	15.0
1896			267	13.2	15.4
1897			293	14.26	16.0
1898			291	14.50	16.5
1899			298	14'28	16.2
1900			255	12'00	16.0
1901			341	15.67	15.9
1902	•••		3 <sup>2</sup> 5 ·	14.68	15.9
1903	•••		312	13.87	15.6
1904			271	11.84	15.5
10 years'	averag	ge	289°1	13.69	15.8
1905	•••		273	11.82	comme

The marriage rate is thus, with that of 1904, the lowest recorded in Eastbourne in recent years, and is nearly two per thousand below the average.

### BIRTHS.

The births registered during 1905 numbered 853, and comprised those of 457 males and 396 females.

The births occurred in the succeeding quarters of the year as follows:—220, 204, 333 and 196.

The following table shows the gradual diminution in the East bourne birth-rate. The birth-rate for England and Wales is also diminishing year by year, and in 1905 showed its most serious drop.

Years.			Number of Births.	Eastbourne, Birth-rate per 1,000 living.	England & Wales, Birth-rate per 1,000 living.
1895			917	23.66	30.3
1896			9 <b>19</b>	23.52	29.6
1897			886	22.01	29.6
1898			934	22.78	29*3
1899			936	22*42	29.1
1900			892	20*99	28.7
1901			907	20.85	28.5
1902			907	20.49	28.2
1903			900	20.00	28.4
1904			963	21.02	27*9
Average	for 10 y	ears	916	21.75	28.9
1905	•••		853	18.34	27.2

It will be seen that in the past year the rate was 18.34 per 1,000 only, and has dropped 3.41 per 1,000 below the poor ten years' average that already existed. Eleven years ago the rate was more than seven per 1,000 higher.

The total number of births is the lowest recorded since Eastbourne was a much smaller place, and was 63 below the already small average.

The rate for England and Wales in 1905 was 1'7 per 1,000 below the average for the preceding ten years.

The decreasing birth-rate of England and Wales is a matter of serious national importance and the preservation of infant life a matter of, if possible, more moment than ever. Diminution of birth-rate being largely due to the onset of an age of increasing luxury and dislike of work cannot be dealt with by a Sanitary Department.

Of the total number of births registered 53 were illegitimate, or at the rate of 62 per 1,000 births. The ten years' average rate had been 48.9 per 1,000.

The average proportion of illegitimate to legitimate births in recent years throughout England and Wales up to 1902 was 41 to each 1,000 births.

The births and birth-rates per 1,000 per annum for the various Wards in 1905 were as follows:—

			Births.	Ra	te per 1,000.
East Ward		•••	499	•••	26.83
Central		•••	94	•••	9.26
West	•••	•••	35	•••	5.49
St. Mary's	•••	•••	225	•••	19.53
mı n					
The Bo	orough	•••	853		18.34

In the East Ward there were 283 more births than deaths.

1)	Central	,,	15 less	"	11
, ,	St. Mary's	,,	112 more	,,	"
	West		23 less	••	,,

These figures shew that the population of Eastbourne is not now increasing so rapidly as regards excess of births over deaths.

### VACCINATION.

I am indebted to Mr. E. J. Hodges, the able Vaccination Officer for Eastbourne and Seaford Registration Sub-districts, for the return on the next page. The more recent years shew the result of his work since his appointment.

The figures shew that we are deprived of the chief weapon for combating Small-pox, and so have to keep the others in efficient order. They are the same as before, and in company with such a non-vaccination report as that on the adjoining page it is well to again specify them.

- (1) Immediate vaccination of those who have been brought into contact with the patient.
- (2) Isolation of the patient at once in the Small-pox Hospital.
- (3) Observation of those who have been brought into contact with the patient until the incubation period is safely passed.
- (4) Disinfection by steam of all articles that will stand it, and, if necessary, destruction of those that cannot be so disinfected.
- (5) For those who have been brought into close contact, or who have to be provided with accommodation while their houses are being disinfected, the necessary accommodation is provided at Acacia Villa.

No great difficulty has been found when necessary in persuading "contacts" to be vaccinated or re-vaccinated; it is different when the danger is unknown or remote.

# VACCINATION RETURN FOR EASTBOURNE DISTRICT including Local Government Returns due on or before February, 1906.

E. J. HODGES, Vaccination Officer.

Total number of Certificates of Success- ful Primary Vaccinations at all ages received during each of last eight years.	The number of certificates of conscientious objection actually received by Vaccination the Children to which they relate, during the year 1905 was 361.
Tota Certifica ful Prima at all at all aduring	1116 1116 228 351 351 355 306 306
Unaccounted for.	* * 491 491 519 519 586 586 133 136 157 153 166
Cases of Prosecu- Ution under Sec. 31.	
Removed out of town and gone, no address.	9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Postponed by Medical C'tificate.	** 18 44 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Deaths under one year old.	*, 99 125 93 94 108 103 1137 115 93 71 71 75
Certificates of Exemption Registered.	*6 56 66 66 66 77 77 102 102 111 111 123 336 336 3372
Had Small Pox.	   **
Certificates of Insuceptibility Registered.	*4   0   1 1 1 1 0   1 0 1 0 0
Successful Certificates Registered.	253 279 279 279 201 202 202 311 311 308 298 298 294
Births,	*2 934 968 946 1013 978 1024 1050 999 999 997 1000 1051
Year.	*1 1891 1892 1893 1894 1895 1896 1898 1899 1900 1900 1901 1901 1903 1903 1903

The numbers marked thus (\*) refer to columns in official Returns to Local Government Board.

† There are deductions to be made from these figures, viz. :-Deaths over 1 year old and removals to other places, which are not shown in Register,

### INFECTIOUS DISEASES.

The Infectious Diseases Prevention Act, 1890, and the Infectious Diseases Notification Act, 1889, have been adopted in Eastbourne since about the time they were passed, and notification has been in force since 1890.

Voluntary Notification of Pulmonary and Laryngeal Tuberculosis or Consumption has been in operation in Eastbourne for three-and-a-half years.

Notification is otherwise confined to those diseases mentioned in the Act. In 1902 Varicella was temporarily added, but was again removed from the list. In previous reports I have dealt at length with my reasons for not advising the addition of Measles and Whooping Cough to the local list. If isolation for suitable cases were provided, notification might be useful. Should Small-Pox become common again, it would be useful, as before, to add Chicken-Pox to the list to avoid overlooked cases.

### NOTIFICATIONS.

Dealing first with those infectious illnesses during 1905 which had to be notified, 142 cases were reported, representing a sickness-rate of 3.05 per 1,000 of the population.

Except for the previous two years, this is the smallest number and smallest rate recorded. The highest rate was in 1890, when it was 16.53 per 1,000, the lowest in 1903, when it was 2.62 per 1,000.

The subjoined table shows the rates for the past ten years, and shows that the rate last year (1905) was nearly one per 1,000 below the ten years' average.

Year	•	Total number of cases notified.	Sickness-rate per 1,000 of population.		
1895		156	4.03		
1896		223	5.64		
1897		213	5 29		
1898		142	3 46		
1899		157	3.46		
1900		148	3.48		
1901		206	4`74		
1902		197	4.45		
1903		118	2.62		
1904		137	2.99		
Average for	10 years	169.7	4.04		
1905		142	3.02		

A complete table, giving details of the various diseases notified from January, 1901, to December, 1905, divided and sub-divided according to years and quarters, is given in the appendix.

As regards the occurrence of Notifiable Diseases in Eastbourne, a table in the appendix shows the notifications week by week. The greatest number in any one week was ten in the last week of October. The same week in the previous year also provided the greatest number of cases in any one week. In two weeks in January and one each in February, March, May, July, September, and October there were no cases to report to the Local Government Board.

The cases occurred in the succeeding quarters as follows:—

					Cases.	Rates.
ıst Quarter			•••		20	1.4
2nd	,,		•••		33	2.8
3rd	,,		•••	•••	27	2.3
4th	, 1				62	5'3

As in previous years there were many more cases in the last quarter than in any other quarter.

The distribution of the notified cases according to Wards and the sickness-rate per 1,000 for each Ward for 1905 are shown in the following table:—

		The					
Disease.		East,	Central.	West.	St. Mary's.	Borough.	
Scarlet Fever		44	12	5	8	69	
Diphtheria		19	5	I	6	31	
Enteric Fever		4	- )	- 1	I	5	
Erysipelas		22	5	I	7	35	
Puerperal Fever		- 1	_	-	2	2	
Total		89	22	7	24	142	
Sickness-rate		4.8	2 2	1,1	2.0	3.02	

The sickness-rates per 1,000 for the Wards for the past ten years are also tabulated and shown below:—

Sickness-rate per 1,000.			East.	Central.	West.	St. Mary's.		
1905					4.8	2.2	1.1	2.0
1904					4.3	1.5	2.3	2.8
1903		•••	•••	•••	3.0	2'I	2.6	2.4
1902					4.3	3.8	4.2	5.5
1901					4.1	2.3	2'2	10.6
1900					2.7	2.2	2.3	4.2
1899	•••				3*3	3*4	1.4	4.3
1898			•••		3.4	1.4	0.8	5.9
1897					4.0	2.4	2.7	10.1
1896	•••				4.7	2 9	2'9	9.8

This table shews, unfortunately, that the East Ward had a high rate compared with recently past years, though it compared favourably with earlier years. This increased rate in the East Ward was due to Scarlet Fever in the autumn. St. Mary's Ward never had a lower rate, and the rates for the West and Central Wards were also very satisfactory. St. Mary's used to be distinguished by a high infectious sickness-rate and in. some quarters this was attributed to the situation of the Infectious Diseases Hospital in the Ward, though, of course, the presence of such an Hospital in a district does not at all affect adversely the health of the surrounding community.

### NOTIFICATIONS—AGE INCIDENCE.

The subjoined table shows that, as usual, the age group 5-15 suffers most in these diseases. The later in childhood to which these diseases are postponed the more chance of recovery as a rule the child has, in addition to the lessened risk of catching the disease:—

Disease.	Total.	0—I	1—5	5—15	15-25	25-65	65 and upwards.
Scarlet Fever	69	I	11	52	4	I	_
Diphtheria	31	-	3	16	3	9	
Enteric Fever	5	_	- )	. 3	I	I	_
Erysipelas	35	3	2	4	3	21	2
Puerperal Fever	2	_		_	-	2	_
Totals	142	4	16	75	II	34	2

# NOTIFICATIONS—SEX INCIDENCE.

Disease		Males.	Females.	Totals.
Scarlet Fever	 	32	37	69
Diphtheria	 	18	13	31
Enteric Fever	 	4	ı	5
Erysipelas	 	15	20	35
Puerperal Fever	 	_	2	2
Totals	 	69	73	142

In health resorts such as Eastbourne it is obvious that many of the cases are importations or caused by imported cases. These are mentioned in dealing with the individual diseases later on.

## HOUSE DISTRIBUTION.

The 105 notified cases of Scarlet Fever, Diphtheria, and Enteric Fever occurred in 86 different houses, being an average of 1.2 cases per house.

In 73 houses one case of	curred	in each	 73
In 9 houses two cases	,,	"	 18
In 2 houses three cases	,,	,,	 6
In 2 houses four cases	,,	"	 8
_			
86			105

In six of the nine instances where two cases of Scarlet Fever occurred in the same house, the patients were notified on the same day. In another there was an interval of nine days and in the other two of some months and in these the second case was apparently quite unconnected with the previous one.

In only two instances did Diphtheria occur in more than one patient in a house. In one house there were three cases notified on the 11th, 20th, and 26th April, and in the other two cases notified on the same day.

In the one instance of three cases of Scarlet Fever in the same house, the patients were all ill when the first was notified.

In the instance where four cases of Scarlet Fever were notified from one house, there was a three days' interval from the notification of the first case to that of the last.

In one house two cases of Diphtheria occurred in February and two cases of Scarlet Fever in May in different children.

All the cases referred to were removed to the Isolation Hospital.

The examination as to the sanitary condition of the house is one of the first and most important steps taken on receipt of notification of infectious illness, for the sanitary condition of a house has a direct effect in the causation and spread of infectious illness. In the case of Enteric Fever and Diphtheria, evil conditions in the sanitary arrangements might encourage the growth of the germ and harbour the specific poison or be the exciting cause of the disease if the specific germ were present. In any case insanitary houses tend to lower the vitality and power of resistance to disease of the inmates. The continual attention to house sanitation in Eastbourne is largely responsible for its satisfactory condition as to health and for the fact that, although cases of infectious illness do occur, they are in small proportion to the population and are as a rule mild.

I have not as in some years tabulated the sanitary condition of the houses in which infectious illness occurred, because such a table misleads. Many of the cases are imported and also in other ways can have nothing to do with the sanitary condition of the premises.

The new rules of the Education Authority restricting the sending of very young children (under 4) to elementary schools will help to prevent the spread of infectious illness.

## PROCEDURE ON RECEIPT OF NOTIFICATION.

In previous reports I have detailed the method adopted on receipt of notification. Detailed records are made, kept, and studied of particulars in each case and are extremely valuable as indicating the lines of preventive measures.

Besides the visit and enquiry of the Sanitary Inspector, doubtful and important cases are the subject of personal visit and enquiry by myself. The masters and mistresses of schools concerned are communicated with, as is also the Public Librarian. The School Attendance Officers give valuable information also in many cases.

Removal to the Sanatorium is urged in every case, with a larger measure of success in 1905 than in any other year, over 94 per cent. of the patients being so isolated, even allowing for doubtful cases.

# MEANS OF ISOLATION IN THE BOROUGH.

The means of isolation have been satisfactory and sufficient during the year. The Isolation Hospitals include:—

 A General Infectious Diseases Hospital—viz., the Sanatorium—for Scarlet Fever, Diphtheria, and Enteric Fever.

This is situated about 150ft. above the level of the sea on the extreme border of the town; it is the last house out towards the Downs at the back of the town. The accommodation here consists of the following:—

For Scarlet Fever—33 beds in three pavilions.

For Diphtheria and Special Isolation—25 beds in three pavilions.

For Enteric Fever-4 beds in one pavilion.

For emergencies there are 17 beds in an iron temporary building.

Two pavilions of 12 and 4 beds respectively are reserved for use of the schools under the various members of the Eastbourne Schoolmasters' Association and two pavilions of seven beds each are reserved for similar occupancy by children of girls' schools. These reserved pavilions are in all respects, except reservation for use, entirely supervised by the Medical Officer of Health and Matron, under the direction of the Sanitary Authority. The pavilions for the use of the School Mistresses' Association were opened in January, 1905.

For the first time for many years there were no patients in the Sanatorium for two days in March, there being no cases of infectious illness in the town to remove thither.

- Acacia Villa.—A cottage isolated and in its own grounds, used for these two purposes:—
  - (a) For the lodging of persons whose houses are being disinfected.
  - (b) For the temporary lodgment of persons who have been exposed to infection and are not themselves ill.

This was used by 13 persons during 1905, 12 during 1904, 7 during 1903, and 32 during 1902. In case of Small-Pox it would be very much used.

3. Languey Hospital.—For Small-Pox.

This is situated just outside the eastern border of the Borough, on the Crumbles, half-a-mile from the nearest house and a mile from the next to that, and over a mile distant from either of the two other Institutions of Isolation. It has not been used during 1905.

A description of these three Institutions, their cost, and their working during 1905 has been given by me in the Medical Officer's Annual Report on the same.

## REMOVALS TO THE ISOLATION HOSPITALS.

Of the patients suffering from Scarlet Fever, Diphtheria, and Enteric Fever, which are the three diseases received at the Sanatorium, 94'3 per cent. were removed thither. One hundred and five of these cases were notified and 99 were removed to the Sanatorium, leaving 6 cases only not removed to act as possible centres of infection.

		Cases.		Removed to Hospital.	)	Not Removed.
Scarlet Fever		69		66	•••	3
Diphtheria		31		29		2
Enteric Fever	• • •	5	•••	4	•••	I
		105		99		6

Of the 69 notifications of Scarlet Fever, 66 cases were isolated at the Sanatorium; of the remaining 3, I was a doubtful case almost at once fatal, I was too ill to remove when notified, and the third was a child kept at home with the child too ill to be removed.

Of the 31 notifications of Diphtheria, 29 cases were sent to the Sanatorium; of the remaining two, one was notified in a late stage after an interval of doubt as to the nature of the case and one was fatal almost at once.

Of the 5 notifications of Enteric Fever, 4 cases were removed to the Sanatorium; the remaining case was not a case of Enteric Fever, but being a doubtful case was notified.

The figures of the percentages of patients notified suffering from Scarlet Fever, Diphtheria, and Typhoid

Fever, who were removed to the Sanatorium, for the past ten years are subjoined:—

In 1895, 72.5 per cent. of the cases.

In 1896, 70.0 ,, ,,

In 1897, 83.8 ,, ,,

In 1898, 90.1 ,, ,,

In 1900, 92.1 ,, ,,

In 1901, 91.4 ,, ,,

In 1902, 88.7 ,, ,,

In 1903, 92.7 ,, ,,

The percentage of cases removed in 1903, 1904, and 1905 of each disease were as follows:—

In 1904, 92.7 In 1905, 94.3

Disease.	Number of cases notified.			Numl	ber ren	ioved.	Percentage of removals.		
	1903	1904	1905	1903	1904	1905	1903	1904	1905
Scarlet Fever	44	64	61	41	61	66	93.2	95.3	95.2
Diphtheria	45	38	39	43	35	29	95.6	92'1	93.2
Enteric Fever	7	8	5	5	6	4	71.4	75.0	80.0

The continued popularity of the Sanatorium is very gratifying and is a great factor in the prevention of spread of infectious illness.

The maintenance of a popular infectious diseases hospital is an essential anywhere, and most of all in a Health Resort to which persons in a delicate state of health are brought.

A fair number of the occupants have been visitors, and they have appreciated its comforts; in some cases they arrived actually suffering from the disease, and even if not ill visitors to the town greatly appreciate the advantage of the Hospital from a preventive point of view, and it is a nearly constant occurrence for the Medical Officer to be able to report to enquiring visitors that there is no notifiable infectious illness in the town outside the Borough Hospital.

Details as to administration etc., are published in my Annual Report on the Infectious Diseases Hospital, Acacia Villa, and Langney Hospital, the nett cost of which to the Borough during 1905 (October, 1904, to October, 1905) was £1,690 7s. 5d., excluding repayment of capital and interest on capital expended.

## SMALL-POX.

Eastbourne remained free from Small-Pox during 1905.

## SCARLET FEVER.

Sixty-nine cases of this disease were notified, being just exactly the average number for the previous ten years. Until March only one case was notified, and that a very doubtful case. Forty-six of the cases occurred after Oct. 10th, there being a small epidemic in the eastern central part of the Borough in October, November and December of so very mild cases that no doubt some were not attended by medical men, and so went on spreading the disease.

Unrecognised cases in schools were the probable causes of spread, and it was a good thing that some of the infant schools were closed on account of measles at the same time. The small epidemic was checked before the end of the year.

No milk supply was involved as a possible cause of spread.

There was one fatal case, but it was a doubtful diagnosis. The patient was an old lady, and, when notified, she was too ill to be moved to the Hospital.

As usual, some of the patients were visitors, and had brought the disease with them.

In my last Report I was able to shew the advantages of the use of the Infectious Diseases Hospital for Scarlet Fever, and as allegations have still been continued against their use, some of the results at Eastbourne are worth repeating, viz.:—

In the ten years, 1894-1903, administration—

- (a) Where the first notified cases were sent to the Hospital only 11.9 per cent. of the children remaining and exposed to the infection were taken ill, whereas 71.4 per cent. of the children were taken ill in the cases where the first patient was not so removed.
- (b) Over ninety-one out of every hundred Eastbourne children escape Scarlet Fever altogether. The Scarlet Fever incidence in Eastbourne being 1 in 1,034, as compared with 1 in 427 for England and Wales.
- (c) The Scarlet Fever fatality at the Sanatorium was only half that of cases outside, and the complications of Scarlet Fever were few and far between.
- (d) From 1901 to 1904 there were no "return" cases.

I have to report, however, that in 1905 there were the following instances of cases from the same house as that to which a discharged patient had gone.

O.C. discharged Sept. 20th. C.C. admitted Oct. 21st. C.C. , Dec. 7th. M.C. , Dec. 29th.

The intervals are long, and it does not by any means follow as a result of enquiries that the secondary cases were infected by the previous discharged children, though, of course, the possibility has to be faced.

No fatal case occurred in the Sanatorium during 1905.

## DIPHTHERIA.

The history of Diphtheria in Eastbourne, as shewn by the number of cases notified, is interesting. From 1890 onwards the numbers of cases year by year have been as follows:—495, 184, 59, 58, 40, 36, 42, 177, 42, 47, 50, 55, 51,

44, 38, and last year (1905) the number fell to the smallest ever recorded—viz., 31—29 of which were safely housed at the Sanatorium.

Although one must always be prepared for the chance of an epidemic, it is fair to assume, I think, that the extensive use of the Sanatorium for isolation, continued attention to house sanitation, to frequent removal of house refuse, to sound and efficient drainage, and to the closing of the pernicious street level sewer gratings have mainly contributed to the decrease in Diphtheria cases and to the less severity of the disease. More than one case, due undoubtedly to an open street level sewer grating, occurred during the year, and I hope the closure of these will be continued.

Of the 31 notifications, at least four were very doubtful, and four or more were connected with an outbreak of Diphtheria that occurred at Chiddingly, near Eastbourne, in July and August.

There was no epidemic in Eastbourne, the cases being spread over the year and over the various wards roughly in proportion to the number of susceptible persons.

There were but two deaths from Diphtheria in 1905; one of the two, which were kept at home, died, and one of the 29 cases sent to the Sanatorium proved fatal also.

Bacteriological aid to diagnosis was used in a few cases.

# ENTERIC (OR TYPHOID) FEVER.

For the fourth year in succession I have to report very few cases. In 1902, 1903, and 1904 there were respectively six, seven, and eight notifications, mostly of non-residents arriving ill in the Borough. In 1905 there were fewer than ever—viz., five.

Of the five notifications of 1905, one was probably not Enteric Fever at all; two were visitors who came to Eastbourne ill, and the other two were Eastbourne residents, who, however, took the disease at Willingdon. One of these last two died. The four certain cases were removed to the Sanatorium. It is noteworthy that not a single case of Enteric Fever appears to have originated in Eastbourne in 1905.

As regards infectious disease, therefore, 1905 was conspicuous for the comparative absence of Diphtheria and Enteric Fever, two of the most serious preventible diseases.

By removal of Enteric Fever patients to the Sanatorium most of the infectious matter is got rid of owing to cremation of the dejecta of the patient and the refuse from the ward on the spot, instead of passing infectious matters into the sewers and so possibly spreading cases.

### PUERPERAL FEVER.

There were two cases of Puerperal Fever notified during 1905; the average in previous years had been three notifications per year. One of the cases was fatal.

The usual steps were taken as regards the disinfection of nurses, etc.

The attempt of the Eastbourne members to get the County Council to allow the Borough to manage its own affairs under the Midwives' Act, 1901, was frustrated, and so that Act is worked from Haywards Heath. I was very willing to work the Act in the Borough as part of my ordinary duties, and it could have been particularly easily done, but this was rejected, and as the Borough pays about one-fourth of the county rate, this trifling duty costs the Borough one-fourth of the county expenses, including one-fourth the cost of a new official.

With efficient machinery on the spot without any expense, it seems a great pity for the County Council to manage the Act for us at a distance of 30 miles and at great expense.

## ERYSIPELAS.

Thirty-five cases of Erysipelas were notified, as compared with a ten years' average of 21.

The chief use of the notification of Erysipelas is that an opportunity is afforded of examining into the sanitary condition of the houses. Practically nothing can be done by the Sanitary Department in the way of prevention and disinfection.

THE NON-NOTIFIABLE DISEASES, such as Measles, Whooping Cough, Diarrhœa, etc., except when fatal, being only known of incidentally, are dealt with under the heading of "Deaths." The School Attendance Officers and the Head Masters and Head Mistresses of Schools kindly give much information and help in dealing with non-notifiable disease.

Tuberculosis, including Phthisis or Consumption, is also dealt with in the part of the Report dealing with deaths from that disease.

## DISINFECTION.

Any article, such as bedding, ordinary clothing, etc., that will stand it, is submitted for disinfection to steam under pressure in a Washington Lyon machine (temp. 260° Fhrt.).

Articles that will not stand superheated steam, such as furs, etc., have been disinfected by perchloride of mercury or formalin solution and by fumigation with sulphur dioxide gas or formalin gas. Very little sulphur is now used, however.

The disinfection of rooms and houses has been carried out by the "Equifex" Perchloride of Mercury Sprayer, by spraying Formalin solution, by fumigation with Sulphur candles or Sulphur and Formalin candles, or by Formalin gas evolved from various lamps. The best disinfection, however, in the case of infected houses, after the burning of the disinfectant, is by re-papering, lime-washing, re-painting, the use of "elbow grease," and in other ways. The disinfection of infected houses or rooms is always done by the Sanitary Inspectors or one particular man in the Sanitary Department under their immediate instructions.

At the steam disinfector the following work has been done:—

Disinfecting—				
Sets of Clothes	•••	•••	•••	51
Loads of Bedding	•••	•••	•••	140
Odd lots				8

This includes the Borough work as well as that of the Sanatorium.

After "Consumption" the usual form of disinfection carried out or suggested has been wet dusting by dusters wrung out of strong disinfectant, especially Formalin, Cyllin, or Izal, but general disinfection is done also. Disinfection after "Cancer" is also done, on request being made, in the hope that it may be of use in preventing spread.



## DEATHS.

The number of deaths registered in Eastbourne during 1905 was 522. Of these 248 were of males and 274 of temales.

The total death-rate for the Borough for 1905 was 11.22 per 1,000, and this is inclusive of every death that occurred in the Borough without any so-called corrections. Excluding deaths of non-residents (97 in number), the rate was 9.1 per 1,000 per annum.

The subjoined table compares these rates with those for preceding years and with those of England and Wales generally:—

Years.	Number of Deaths.	Total Death-rate (no exclusion).	Death-rate excluding deaths of Visitors.	Death-rate of England and Wales.
1895	521	. 13*45	11.66	18.7
1896	454	11.49	10.05	17.1
1897	399	9,91	8.72	17.4
1898	494	12.02	11.31	17.2
1899	566	13.26	10.32	18.5
1900	501	11.48	10.45	18.5
1901	498	11.42	10.22	16.9
1902	541	12.53	11.02	16.5
1903	495	11.00	9.62	15.4
1904	480	10.49	9.5	16.5
io years' ) average	494	11'74	10.33	17.52
1905	522	11.55	9.1	15'2

The rate for 1905 for England and Wales is remarkably low, being 2 per 1,000 below the ten years' average. In spite of this low rate the rate for Eastbourne for 1905 was 4 per 1,000 less.

Comparison by this table shews that the total death-rate is 0.52 per 1,000 below the average, and the resident death-rate 1.2 per 1,000 below the average. The number of non-residents who died was unusually large.

A rate of 0.52 per 1,000 below the average in a population of 46,500 shews a saving of 24 lives in 1905 as compared with each of the previous ten years.

Considering that the Borough supplies the surrounding district with the General Hospital (Princess Alice Memorial) and the Union Infirmary and Workhouse, and that deaths in these and in the various convalescent homes and smaller hospitals of the district go to swell the Eastbourne deathrate, a total rate of 11'22 per 1,000 only is satisfactory.

In 1905 the total death-rate was 4 per 1,000 below that for England and Wales; in 1904, 1903, 1902, it was 5.7, 4.4, and 4.1 per 1,000 lower respectively.

In making comparisons, it is to be noticed that the total rate has been taken in each case. So-called "corrected" rates are often unfairly used in comparisons and very many factors are necessary to make up a fairly corrected rate, one factor especially, viz., the number of Eastbourne people who died elsewhere cannot be accurately estimated.

In some of the detailed tables in the Appendix it will be found that the deaths of the 26 non-residents who died in institutions are excluded by order of the Local Government Board. The remaining 71 non-residents' deaths should with equal reason be excluded. To exclude part of these non-residents' deaths would unnecessarily complicate this Report, and so, except in the tables alluded to (and there an explanatory footnote is added) the whole of the deaths are dealt with together in this Report.

## SEASONAL MORTALITY.

The deaths during the last five years, 1901, 1902, 1903, 1904, and 1905, occurred in months as follows:—

	1901.		1902.	1903.	1904.	1905.
First Qr.	 I31 { January February March	46 41 44	$153 \begin{cases} 56 \\ 52 \\ 45 \end{cases}$	143 $\begin{cases} 39\\44\\60 \end{cases}$	$137 \begin{cases} 40 \\ 46 \\ 51 \end{cases}$	$164 \begin{cases} 63 \\ 44 \\ 57 \end{cases}$
Second Qr.	121 { April May June					
	July August September		$116 \begin{cases} 36 \\ 39 \\ 41 \end{cases}$	$112 \begin{cases} 33 \\ 41 \\ 38 \end{cases}$	$105 \begin{cases} 32\\ 38\\ 35 \end{cases}$	$107$ $\begin{cases} 42\\ 30\\ 35 \end{cases}$
Fourth Qr.	 October November December.	39 34 47	$129 \begin{cases} 43 \\ 40 \\ 46 \end{cases}$	$119$ $\begin{cases} 42\\ 33\\ 44 \end{cases}$	$130 \begin{cases} 44 \\ 43 \\ 43 \end{cases}$	$113 \begin{cases} 38 \\ 32 \\ 43 \end{cases}$

Taking a series of years, the most fatal month in Eastbourne is March, followed in this respect by January and April. The least fatal month is July and next best November and August.

The following table shows how the death-rate of Eastbourne compares quarter by quarter with that of England and Wales:—

1905. Districts.			ıst Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year.
Eastbourne			14'11	11.87	9.50	9.72	11'22
	76 great Towns	}	17.2	14'7	15'2	15.8	15.7
England and Wales.	141 smaller Towns	}	17.0	13.6	13.3	13.7	14.4
	Rest of the Country	}	18.3	14 5	13.0	14'2	14'9

It is not a mere coincidence, but a result of sanitary conditions that there is more difference between the better death-rate of Eastbourne in the third or summer quarter and that of England and Wales than there is between the rates in other quarters. Our comparative exemption from infantile diarrhæa, which is dealt with later on, is a great factor.

It is gratifying to record that in 1905 the steady decrease of late in "preventible" deaths is maintained in

Eastbourne, and continuous efforts in the direction of vigilance over sanitary affairs are justified and must be maintained.

## SEX MORTALITY.

The fact of the excess of females in Eastbourne would, as a rule, lead to a slightly diminished death-rate, since the death-rate for females is usually lower than that for males. The 522 deaths of 1905 were divided as follows:—

Males—Deaths 248, Death-rate 12.7 per 1,000. Females— ,, 274, ,, 10.1 ,,

This is based on the estimate as to the proportion of sexes given under "Population" earlier in this Report.

Males exceeded females in deaths from Congenital Defects and Premature Birth (21 males to 15 females), in Whooping Cough (6-3), in Meningitis (7-2), in Urinary Diseases (10-6), and in deaths from Violence (10-5).

Females exceeded males in deaths from Cancer (33-23), Heart Diseases (40-21), and Old Age (17-9).

It will be seen that the male infant is a more troublesome one to rear than the female, the excess of female deaths being from causes operating later in life.

## AGE MORTALITY.

The age groups of the population have been given earlier in the Report, there being a slight excess in Eastbourne of young persons of a healthy age.

The death-rates at different ages and of different sexes are in some respects more important for instituting comparisons than the total death-rate, since in them there are no sex and age fallacies. Hence the following table is subjoined:—

	Mal	es.	1	Females.				Both Sexes.		
Ages.	No.	Deaths	Death- rate per 1000 liv- ing at each age group.	No. living.	Deaths	Death- rate per 1000 liv- ing at each age group.	No. living.	Deaths	Death- rate per 1000 liv- ing at each age group.	
Under 1	420	53	126.19	436	34	77.98	856	87	101.6	
r—5	1647	12	7.28	1613	8	4.96	3260	20	6.13	
Total under 5.	2067	65	31.45	2049	42	20.2	4116	107	25'99	
5—15	4696	8	1.40	4403	8	1.82	9099	16	1.46	
15 -25	37 <sup>8</sup> 5	10	2.64	6565	11	1 67	10350	21	2.03	
25—65	7865	181	23.01	12784	109	7.84	20749	190	9.11	
65 & over	877	84	95.84	1309	10	79.4	2186	188	86.0	

## WARD MORTALITY.

The deaths during 1905 were distributed over the various Wards of the Borough as shown in the following table, the deaths occurring in Institutions being included in the Ward from which the deceased had originally come:—

Wards.		No. of Deaths.	Annual Death-rates per 1,000.				) <b>,</b>		
		1905.	1905	1904	1903	1902 1901  14'12 13'04  11'81 10'06  7'97 7'51  10'05 10'37  — —			
East			•••	216	11.6	11.39	12.43	14'12	13.04
Central		•••		109	11.0	9.45	9,13	11.81	10.09
West				58	9.1	6.56	6.61	7.97	7.21
St. Mary	's			113	9.6	10.62	10.32	10.02	10.32
Deaths o			ents 	26	-	_	_	_	_

The deaths in Institutions being distributed over the districts from whence the patients came, the Ward death-rates

are correct, except that those of the West and Central are somewhat larger owing to the deaths of the other non-residents (not in Institutions) being mainly in those Wards.

The leading feature in the table is the evidence of continued satisfactorily low rates in the East and St. Mary's Wards, these being the more thickly-populated parts of the Borough.

Taking their respective populations and conditions into account, no one of the Wards had any cause of death specially operating, with the single exception that in the East Ward, as usual, the deaths from Premature Birth and Congenital troubles were out of proportion even to its comparatively large birth-rate.

There were 97 deaths in Institutions as follows:—

Institution.	Ward.	Number of Deaths.
Workhouse	St. Mary's	56
Princess Alice Hospital	St. Mary's	29
Borough Sanatorium	St. Mary's	3
Other Institutions	St. Mary's, East & West	9

As mentioned above, these deaths have been properly distributed over the various Wards in calculating their rates.

#### INFANTILE MORTALITY.

The total number of deaths of infants—that is, of children of ages under one year—was 87; males, 53; females, 34. Infantile mortality is calculated on the number of births registered, and for 1905 was at the rate of 102 per 1,000 births.

As will be seen from the following table, this is the smallest number of deaths and the next but one lowest Infantile Mortality rate for Eastbourne in recent years, and is 16 below the 10 years' average rate per 1,000 births:—

Year.	Deaths under 1 year.	Mortality per 1,000 births.
1895	122	133
1896	105	115
1897	98	110
1898	130	139
1899	136	145
1900	108	121
1901	94	104
1902	101	111
1903	97	108
1904	89	92
Average of 10 years	108	118
1905	87	102

More attention is necessary to the rate than to the actual number of deaths. Though the number of deaths of infants is the smallest recorded, it is partly because the total number of births is also so low.

The rate of 102 per 1,000 births is not, however, comparatively unsatisfactory, for the infantile mortality for England and Wales per every 1,000 registered births in 1905 was 128. Infants in Eastbourne died to the extent of 102 to every 1,000 births, the difference being, therefore, 26 per 1,000 births, or in detail a mortality of 38 per 1,000 births less than that of the 76 great towns, 30 per 1,000 less than that of the 141 other towns, and of 11 per 1,000 less than that of the rural districts.

Thanks to its meteorological and other advantages and the constant sanitary supervision, Eastbourne does not get the large proportion of infantile diarrhœa of other places in the summer, hence the good record for 1905 and other years compared with other parts of England and Wales; but the figures for 1905 as regards infantile diarrhœa are marvellous, only two deaths being reported as against a 10 years' average of 21.6. Such a return as two deaths only in a year from infantile diarrhœa in a population of 46,500 is probably unprecedented, and further reference to this is made in the item on house refuse removal later on, the steady decrease in mortality from infantile diarrhœa being coincident with improvements in house refuse removal.

The absence of diarrhœa as a cause of infantile mortality in 1905 shews that this fertile cause of mortality can be kept down by sanitary measures. The most important are house and personal sanitation, removal of nuisances and house refuse, care over food, wet cleansing and frequent watering of streets, and the filling of gullies with clean water.

The subject of infantile mortality is very much to the fore just now, for very good reasons. The number of deaths of children under one in this country is a disgrace and a great loss. As pointed out in an article in an illustrated monthly journal recently, the proportionate loss of children under one vastly exceeds the loss under one year of offspring of horses, cattle, etc.

A sort of standard has been suggested as a fair percentage of loss—viz., 100 per 1,000 births. This 100 is supposed to represent the proportion of quite unpreventable deaths. It should really, however, be much less in an ideal community, for under proper conditions there would be many fewer deaths from premature birth and congenital afflictions, for instance, which accounted for 35 of the 87 infantile deaths in Eastbourne, and which are often due to the condition of the parents at conception, and especially that of the mother immediately before the birth of the child.

It is not generally known that there are deaths which are never certified either by doctors or coroners, and which, in spite of this, may be and are registered by registrars. The death of one infant only in Eastbourne in 1905 was

registered in this way, and as no doctor's or coroner's certificate was received, the loophole for crime can easily be seen. Fortunately, these uncertified deaths are scarce in Eastbourne.

The tables given below shew that in 1905 there were fewer deaths of infants from Zymotic diseases than in any recent year, and that developmental diseases, viz., premature birth and congenital ailments constitute the cause of the increased rate of infantile mortality.

Bronchitis and Pneumonia accounted for 14, General Debility for 13, and Premature Birth for 25 deaths.

Of the 87 deaths of infants, 59 occurred in the East, 10 in the Central, 3 in the West, and 15 in St. Mary's Wards.

The subjoined tables shew the principal causes of deaths of infants in 1905 and in recent years:—

Deaths.	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
From Zymotic Diseases	26	26	45	65	27	28	20	23	17	14
Parasitic Diseases	-	_				1	-	I		-
Constitutional Diseases	9	8	11	8	3	6	5	2	8	4
Developmental Diseases	23	21	22	17	26	21	25	29	25	35
Local Diseases	24	28	41	29	36	28	37	34	30	27
Deaths from Violence	7	4	2	2	-	4	2	I	2	ı
Deaths from ill-defined and not specified causes	16	II	9	15	16	6	12	7	7	6

## ZYMOTIC DEATHS.

Disease.			1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
					-		-			_		
Measles			6	-	4	-	-		8		-	-
Whooping Cough		•••	-	2	I	14	3	3	1	13	2	7
Diarrhœa			30	20	38	45	18	24	5	5	II	2
Other Zymotic Diseas Influenza)	ses (ch	iefly 		4	2	6	6	ı	6	5	4	5

#### SENILE MORTALITY.

Of the 522 deaths which occurred in 1905, there were 188 of persons over 65 years of age.

Between	65	and 75	years of	age,	39;	Males	47,	Females	42
,,	75	and 85	1)	7	7;	11	30,	,,	47
Over		85	1)	2	2;	,,	7,	,,	15

## DEATHS OF VISITORS,

There were 97 deaths of non-residents in Eastbourne—26 in institutions from districts outside of Eastbourne, and 71 general visitors. Six died from Tubercle and seven from Cancer.

## The Causes of Death.

The deaths recorded during 1905 were distributed amongst the various classes of disease as follows. Deaths during 1903 and 1904 are similarly classified for comparison:—

		No.	of Dea	iths.	Percentage of Total Deaths.					
Class.	Disease.	1905	1903	1904	1905	1903	1904			
I.	Zymotic Diseases	45	57	45	8.4	11.21	9*38			
I1.	Parasitic and Dietic Diseases	5	5	4	0.0	1.01	0.83			
III.	Constitutional Diseases.	126	115	124	24.0	23.53	25.83			
IV.	Developmental Diseases	66	58	59	12.2	11'72	12.59			
V.	Local Diseases	261	236	217	20.1	47.68	45.51			
VI.	Deaths from violence	15	14	21	2.7	2.83	4.37			
VII.	Deaths from ill-defined	6	10	5	1'2	2'02	1.04			
VIII.	and not specified causes Not certified	I	_	5	0'2	_	1.04			
		522	495	480	100,00	100,00	100,00			

# Deaths from Zymotic Diseases.

The Zymotic death-rate of the Registrar-General refers to the rate caused by deaths from the seven principal Zymotics, as follow:—Small Pox, Measles, Whooping Cough, Scarlet Fever, Diphtheria, Fever (Typhoid, Typhus, Continued), and Diarrhœa. The other Zymotic diseases include Miasmatic, Septic, Venereal, and Zoogenous Diseases.

The day has gone by when the above have been considered the only "preventible" diseases, and, therefore, the only ones with which a Sanitary Authority is concerned. Sanitary conditions are necessary for combating any form of disease and many diseases are more serious and more easily preventible than those included above.

The table on the previous page of the causes of death shew that less than 10 per cent. of the total deaths were due to Zymotic disease. The result of sanitary activity is seen in this diminution year by year.

In 1905, in Eastbourne there were 45 deaths from Zymotic disease, compared with 45 in 1904 and an average of 77 in the previous five years.

In the Appendix there will be found a complete table shewing the deaths from the seven principal Zymotic diseases compared with those of other years. The 45 Zymotic deaths of 1905 resulted from the following diseases:—

Disease.	Males.	Females.	Total.
Influenza	 8	10	18
Measles	 2	3	5
Whooping Cough	 6	3	9
Diphtheria	 _	2	2
Enteric Fever	 ı		ı
Diarrhœa	 2	_	2
Scarlet Fever	 _	I	1
Erysipelas	 2	2	4
Pyæmia, Septicæmia, &c.	 I	I	2
Puerperal Fever	 _	1	ı
Totals	 22	23	45

The Zymotic death-rate for 1905—that is the death-rate from the seven chief Zymotic diseases was a record for lowness, viz., 0.40 per 1,000 per annum.

In 1894—11 years since—the rate was down to 0.48, but in no other year was it as low. In 1902-3-4 it was 0.8, 0.7, and 0.52 respectively.

The Zymotic death-rate for England and Wales in 1905 was 1'52 per 1,000 per annum, or nearly four times as great. For the 76 great towns it was 1'88, for the 141 smaller towns it was 1'5, and for the rural districts 1'09 per 1,000 per annum.

Comparatively as well as absolutely, therefore, the Eastbourne Zymotic death-rate is very satisfactory. Including Influenza and the other diseases not included by the Registrar-General, the rate was 0.94 per 1,000, also the lowest recorded.

The Zymotic rates of the respective Wards for ten years are shewn to be as in the following table:—

		Zymotic Death-rates.										
Year.	No. of		Wa	Town.								
1	Deaths.	East.	East. Central.		St. Mary's.	Death-rate from seven chief.	Total.					
1896	68	2'40	0'40	0,30	2*20	1'42	1.26					
1897	55	1,00	0'44	0.13	1.40	0*94	1.53					
1898	94	3.04	1.21	0.81	1.92	1 .84	2.06					
1899	136	3.80	2*30	0.80	3.50	2.08	2.00					
1900	74	1,00	1,30	1,10	1,30	0.69	1.21					
1901	54	1.75	0.22	0.45	1.41	1,01	1 '24					
1902	64	2.02	0'92	0.92	1,19	0.74	1'44					
1903	57	1.96	1.03	0.19	0.80	0.80	1'27					
1904	45	1.41	0'41	0.00	1.31	0'52	0.08					
1905	45	1.02	0.20	0.62	1.11	0*40	0'94					

The highest recorded ordinary Zymotic rate for East-bourne was in 1899, when it was 2.08, and the lowest in 1905—viz., 0.40 per 1,000 per annum.

The Zymotic deaths were distributed as follows:—East Ward, 20; Central, 5; West, 5; and St. Mary's, 13; the rates being as in the table above.

#### INFLUENZA.

Eighteen deaths were registered from this disease in 1905, the average for the previous 10 years having been 16.4. This disease seems to have become a permanent feature of the death lists of each community in England. There were as many as 33 deaths in 1895 and as few as 3 in 1896, but in each year there were some deaths from Influenza. The deaths occurred almost equally at all ages, and in the cases of two more females than males.

#### MEASLES.

Five deaths occurred from this disease, two of males and three of females, all towards the end of the year. The average of the previous 10 years was 4.7 per annum, but occurring in outbursts thus:—16 deaths in 1896 and 19 in 1902, the remaining 12 being spread over three other years.

Measles became epidemic in Eastbourne at the close of the year, and necessitated then and at the beginning of 1906 the closing of Willowfield, St. Mary's, All Souls', Trinity and Norway Infants' Schools.

This disease is so very infectious in the early stages, when it resembles an ordinary cold, that preventive measures are very difficult to put into practice. Notification has been a failure where it has been tried, but a trial has not been thoroughly given of notification coupled with isolation, as in Scarlet Fever, for instance.

## SCARLET FEVER.

A case of Scarlet Fever was notified in January, 1905, followed closely by a death certificate in the case of the same patient. I understand it was a doubtful case, and as the patient was an old lady, with no history of possible exposure to Scarlet Fever and with some other malady, it is problematical if Scarlet Fever were the cause of death. Except for this death there were none from Scarlet Fever, and the 10 years' average has been but o'6. The above patient was not removed to the Sanatorium.

## ENTERIC FEVER.

There was one fatal case in 1905—viz., that of a young man who contracted the disease at Willingdon. The 10 years' average had been 3 per annum.

## PUERPERAL FEVER.

One death from this disease occurred during 1905. The yearly average for 10 years has been 1. The Midwives' Act

of 1901, carried out by the County Council, as far as East-bourne is concerned, at a considerable expense, is worked from Haywards Heath, and I have no particulars. The existing machinery in Eastbourne was sufficient for the work, though no doubt in some places the Act will be of use.

## WHOOPING COUGH.

Six males and three females, all infants and very young children, died of this disease in 1905. Nine is also the average number for the previous 10 years. This disease, with Measles and Infantile Diarrhea, are the three great causes of mortality of children in England at present. Careful treatment of the cases would save many lives, for, like Measles, Whooping Cough is more or less fatal in proportion as the patient is less or more well looked after as a rule.

#### DIPHTHERIA.

Just as in 1904, there are but two deaths to record from this disease in 1905, whereas the 10 years' average is 6.3. Previous to this the deaths from Diphtheria in Eastbourne were still more numerous, so that from year to year a steady improvement has gone on. Fifteen years ago Diphtheria was a very serious cause of death in Eastbourne, and it may fairly be taken that the steady improvement in sanitation is responsible for the improvement in health. The closing of street-level sewer gratings has been a great step in fighting Diphtheria.

#### DIARRHŒA.

This disease as a cause of death has been commented on under "Infantile Mortality" and later under "Removal of House Refuse." There were but two deaths in 1905, against a 10 years' average annually of 26·1—a most striking diminution, due, as I have said, very largely indeed to the action of the Sanitary Committee and Department, especially in attending to offensive accumulations and dirty conditions and in increasing frequency of removal of house refuse.

No other fatal Zymotic case in 1905 calls for special remark.

## Dietic and Parasitic Diseases.

In these classes of diseases there were five deaths directly ascribed to Alcoholism. The recent average has been about four per year. Similar cases are sometimes put down to other concurrent maladies, and in 1905 eight deaths may fairly be set down to Alcoholic excess—i.e., one below the average.

## Constitutional Diseases.

The deaths from these diseases being tabulated in the Appendix, only the more important ones are referred to here.

#### RHEUMATISM AND GOUT.

One death only was registered from diseases associated with Rheumatism and Gout. The average for ten years was 5.5. Eastbourne is apparently comparatively free from diseases of this class—at all events, the very low death-rate would seem to indicate this.

#### CANCER.

Fifty-six deaths in 1905 were ascribed to the various forms of "Cancer"—35 to Carcinoma, 6 to Sarcoma, and 15 to "Cancer" generally.

The average for the previous ten years was 35 deaths per annum and in 1903 and 1904 the deaths were 52 and 54 respectively.

Most of the patients were from 45 to 65 years of age and they were 23 males and 33 females. The youngest patient was under 25, the eldest over 85. Seven were non-residents.

In the 33 females the parts affected were the generative organs 9, the breasts 7, the stomach and intestines 12, and

other parts 5. In the 23 males the disease was spread over many more parts of the body, in 19 cases being connected with the alimentary canal from the mouth (6), jaw (1), gullet (2), and stomach (4), to intestines (6).

The rate in Eastbourne in 1905 was 1'2 per 1,000. In England and Wales for the last published year (1903) it was 0'7 for males and 1'0 for females, but steadily increasing.

Research into the causes and treatment of Cancer is being actively pursued in London and elsewhere. In the absence of knowledge as to its cause, treatment is particularly difficult and preventive measures practically impossible. Disinfection is now frequently carried out after deaths from Cancer in the hope of preventing spread, but without any real knowledge as to its possible use. Mr. Butlin in a recent address on Cancer entitled "Cancer is a Parasitic Disease," says: "That Carcinoma is a communicable disease there can remain no possible doubt. It is a matter of congratulation to our unhappy race that a communicable disease such as Carcinoma is communicated spontaneously so very rarely that we may regard it as 'not catching' from a popular point of view."

#### TUBERCULOSIS.

During 1905 there were 42 deaths registered from Pulmonary Tuberculosis, "Consumption," or Phthisis and 13 deaths from other forms of Tuberculosis.

Twenty-eight males and 27 females died of all forms of Tuberculosis, of whom all but 6 were residents. The youngest cases were those of 4 infants; the oldest were two patients over 75 years of age. The age period 35 to 45 suffered most with 12 cases. The average for 10 years was 43'4 deaths from Tuberculosis of the lungs and 15'8 from other forms of Tuberculosis per year, so that 1905 has been slightly under the average, but not much.

The death-rate for the year 1905 from Phthisis or Tuberculosis of the Lungs in Eastbourne was 0.90, in 1904 0.69, and in 1903, 0.73 per 1,000; 1905, therefore, shows a regrettable falling back from the previous two years.

The 10 years' average was over 1 per 1,000, and so there is some improvement in 1905 compared with the average, but less so than in 1903-4; the rate is well under that of the last-published 10 years' average for England and Wales, viz., 1.7 per 1,000, so that for a health resort to which some of these patients come when already ill, the rate is not unsatisfactory; it calls, however, for every possible vigilance.

The subjoined table shews that in 1905 there were more cases of "Consumption" (Tuberculosis of the Lungs) than in 1903 and 1904. There were, however, less than the average number of cases of other forms of Tuberculosis. Two only of the 13 cases were of Tubercular Meningitis—an unusually small number.

Disease.		Number of Deaths.											
		1896	1897	1898	1899	1900	1901	1902	1903	1904	1905		
Phthisis of the Lungs	51	46	37	42	40	52	44	57	33	32	42		
Other forms of Tubercu- losis	14	19	11	21	18	11	15	12	15	22	13		

It is an advantage to Eastbourne that, owing to its South-Eastern open aspect and bracing climate, it is not suitable to advanced cases of Consumption, although early cases might do well. Places suitable to advanced cases, namely, those more sheltered and less bracing, are apt to suffer considerably from being the last resort of advanced consumptive cases. Eastbourne climate is one essentially for the convalescent and overworked to rest or recover in rather than for those with advanced lung disease.

The second International Congress on Tuberculosis in Paris in 1905 revived the flagging interest of the public in the combat with Tuberculosis, but so much is not heard of it as in 1901 and 1902. In sanitary departments, however, the work goes on.

In view of the seriousness of the disease in that it causes more than one-tenth of the deaths in Eastbourne still, I herewith repeat my report of last year with some slight alteration. I have not added a long report I presented to the Sanitary Committee in the autumn on the advisability of providing a sanatorium for ratepayers, as it is still under consideration.

In Eastbourne, among the steps taken by the sanitary department with regard to the prevention of consumption are the following:—

- 1. Voluntary notification, with consequent disinfection and instruction. In 1905 there were 29 notifications (a decrease on last year) and in many of these cases the assistance of the authority was asked for and obtained.
- 2. The distribution of leaflets setting forth the general preventive measures which should be taken in connection with a case of consumption.
- 3. Disinfection after cases of consumption whenever opportunity is afforded, and especially after death.
- 4. Examination of sputa, where requested, to ascertain if consumption exists.
  - 5. Attention to and examination of food supplies.
- 6. Continual attention to general sanitation, including the abatement of nuisances, especially those conducive to the spread of tuberculosis. These nuisances are not merely such as offensive accumulations and other offences to the nose and other senses, but include overcrowding, want of ventilation, and lighting of houses, damp and insanitary conditions generally.

There are two additional methods in which more work might be done.

- a. In increased education of the public as to the causes, nature and extent of the disease and how unnecessary most of it is, if proper steps were to be taken.
- b. Provision of a Sanatorium.—This Sanatorium should not be merely to replace the Workhouse Infirmary, i.e., for the reception of chronic and hopeless cases until death, but as a preventive measure to take in for a time cases where the patient is still able to work, to educate the patients as to how to live and to prevent spread to their families and fellowworkers. The cases should be kept long enough to teach them to get on for themselves and by care to make their own houses Sanatoria.

Admission to such an institution should be strictly limited to ratepayers of some years' standing and their families, for it would be most inadvisable to attract consumptive patients to Eastbourne. I hope that a scheme may be devised whereby Eastbournians may have the advantage of sanatorium treatment, not merely for curative purposes, but from an educational point of view.

The decrease in Consumption commenced long before Sanatoria became the fashion, by improved sanitation, and after all the object of a Sanitary Authority should be to make every house and the whole borough as sanitary as a Sanatorium.

# Developmental Diseases.

There were 25 deaths from Premature Birth in 1905, as compared with an average of 18.3 in the previous 10 years; there were, however, nine also from Congenital defects and one from injury at birth.

Of these 35 deaths 25 occurred in the East Ward, naturally because there were most births there; two only occurred in St. Mary's Ward, a very small proportion considering the births there.

There were 26 deaths ascribed to old age, the 10 years' average being about the same.

## Local Diseases.

Diseases of the nervous system caused 25 deaths, nine from Meningitis being the largest group.

Diseases of the Heart and Blood Vessels caused 98 deaths, the chief groups being general "Heart Disease" 29 and Apoplexy 22.

Diseases of the Respiratory System, apart from Tuberculosis of the Lungs, caused 76 deaths, 30 from Bronchitis and 34 from forms of Pneumonia. Seventeen of these deaths were in children under five.

Diseases of the Digestive System caused 35 deaths, five of which were from cirrhosis of the liver, as a rule Alcoholic.

Diseases of the Urinary System caused 16 deaths, 13 being from Bright's disease or inflammation of the kidneys.

The Table in the Appendix gives details of these and other groups; they are in about the same proportion as in other years.

## Deaths from Violence.

There were 15 deaths from Violence, a number just about the average. The ages ranged from one to nearly 85.

The deaths from Violence were in the proportion of 0.32 per 1,000 of the population, as compared with 0.57 per 1,000 of the population for England and Wales generally.

Five males and one female committed suicide, a number double the average. Four were non-residents.

# Deaths from ill-defined and not Specified Causes.

There were five deaths of infants registered from Debility and Inanition during 1905 as compared with the same number in 1904, six in 1903, eight in 1902, five in 1901, fifteen in 1900, and fourteen during 1899.

The deaths under this heading occurred, two in the East Ward, none in the Central Ward, one in the West and two in St. Mary's, and were, as usual in such cases, among the poor.

## Uncertified Deaths.

I regret to record again one uncertified death, as compared with five in 1904. While the law allows this scandal, the loophole for crime remains. In England in 1905 the causes of 1.6 per cent. of deaths were uncertified.

# Inquests.

Thirty-one deaths on which Coroner's inquests were held were registered in 1905; twenty-six were deaths of residents and five of visitors, and twenty of males and eleven of females. The Chief Constable's report contains details.

# SANITARY WORK, 1905.

As in other years, in accordance with the Memorandum as to Annual Reports of Medical Officers of Health issued by the Local Government Board, I herewith report on certain places and trades over which the Council has supervision and which are in the Sanitary Department—e.g., Lodging-houses, Slaughter-houses, Bake-houses, Dairies, Cowsheds and Milkshops, Factories and Workshops, and Offensive Trades: also I have to report on Nuisances, proceedings for their abatement, any remaining unabated, etc. By Section 132 of the Factory and Workshops Act, 1901, I am instructed to "report specifically on the administration of this Act in Workshops and Workplaces," and to send a copy of this report to the Secretary of State, and commencing last year additional tables were sent to me to be filled in for the Home Office. In 1905 an additional form for completion regarding Infantile Mortality has been sent to me by the Local Government Board.

There is accordingly in this Section of my Report a summary of the work done in the Sanitary Department as regards the above-mentioned and other items which our duties include. The tables and other matter are in nearly the same form as in previous years, with the additional table of the Local Government Board.

Inspection of houses by the Medical Officer of Health in accordance with Section 26 of the Customs and Inland Revenue Act, 1890, has also been carried out.

Alterations in the staff took place during 1905. At the commencement of the year there were four Sanitary Inspectors. Mr. C. H. Taylor resigned on receiving another appointment, and it was decided not to replace him at once. For the latter half of the year there were three Inspectors only, and the Sanitary Districts were re-arranged as mentioned at the beginning of this Report. Mr. Spears has the East Ward with its population of 18,601, Mr. Ollett has the

Central and West Wards with a combined population of 16,196, and Mr. Henderson has St. Mary's Ward with a population of 11,703, and he has also to attend to the meteorology of the Borough—a most important item for a health resort. Mr. Sheward, the ex-Meteorologist, resigned at the end of September.

Each Inspector has charge of his district in all respects, there being no separate Inspectors for special purposes, such as for Factories and Workshops, Meat Inspection, etc. The growth of the Borough adds work continually to the department, as well as the addition from time to time of new duties.

The general supervision is, by the wish of the Council, in the hands of the Medical Officer of Health, there being no Chief Inspector in the sense of supervision over the other Inspectors. Mr. Spears's appointment is under the Local Government Board as well as under the Council.

Each of the districts has its peculiarities and characteristics, and the tables that follow of some of the sanitary work will shew that while one district has an excess of one item of work, such as drainage, another exceeds in something else, so that there is ample work for each Inspector in his own district.

The staff also includes a Head Clerk, an Assistant Clerk, and an Assistant for aiding the Inspectors in work such as examining drains, removing infectious cases, and disinfection.

Various leaflets and directions are from time to time issued by the Department. One on "The Feeding of Infants" has been issued regularly in the cases of births in the Borough; the next most regularly issued is one on the "Prevention of Consumption" and precautions that consumptives should take. A new one on "Measles" has been produced, and there are others on General Sanitation (Suggestions to Householders), the Shop Hours Act, the Sale of Margarine, etc., in circulation.

#### HOUSE SANITATION.

Constant attention to the good sanitation of houses continues to be a great feature in the work of the Department as it has always been. Eastbourne has a reputation in this respect which must be of great use to the Borough as a health resort. Particulars as to Sanitary Certificates are referred to later on, but even where a Sanitary Certificate is not asked for the conditions required are almost the same. It is no mere coincidence that the death and sickness rates of Eastbourne are constantly low, for an insanitary house induces a low state of health generally, rendering the inmates especially liable to illness and at the same time less able to combat the illness itself.

Notices for structural repairs are always served on the owner; for keeping the house clean and in a satisfactory state the tenant is responsible.

A great improvement in methods was adopted by the Council at the end of the year in transferring all drainage work of existing houses, and in houses for Sanitary Certificates, from the Building Surveyor to the Sanitary Department. It abolishes the necessity for visits to the same work by two officials of the Corporation of different departments, and having two different ideas and standards of sanitary perfection. Time, expense, and irritation to builders and the officers themselves will be saved by this new procedure.

As usual in recent years the procedure on receipt of information as to a sanitary defect or nuisance has been to call the attention of the owner or occupier to the fact either verbally or by letter. The great majority of nuisances are dealt with in this way. If, however, no steps are taken to abate the nuisance or remedy the defect, the matter is brought before the Sanitary Committee and a legal notice is served. If again no steps are taken on the issue of this notice the attention of the owner or occupier is again called

to the matter by letter, and legal proceedings follow. Fortunately, as will be seen by the table later on, the number of legal proceedings is very small indeed.

Attention to the general work of the office and to the conditions to which attention is specially called by illness or otherwise has again so occupied the Inspectors throughout the year that house to house inspection has not received so much attention as it would have if we had four Inspectors.

I attach a summary of some of the work done by the Inspectors throughout the year, especially with regard to structural work in older houses, abating nuisances and general improvement of sanitary conditions. Much of the work has been done in connection with the granting of Sanitary Certificates. It is obviously very difficult to tabulate all the work.

Five hundred and thirty-three entries were made in the Inspectors' Permanent Journal as to objectionable conditions found in certain premises—i.e., as to serious defects—and 204 entries had to be carried forward to the Register of Defects to submit to the Committee to enforce abatement of nuisance. Two hundred and twenty-seven notices were issued, as shown in tables appended, and very many letters and reports were also written concerning nuisances on premises. In addition to the 227 notices, 348 special letters were written requesting structural amendments to be made, with a view to getting the work done without legal formalities; these 348 letters affected many more different premises, almost entirely dwelling houses. Innumerable verbal notices have been given concerning trivial nuisances and also where nuisances required very immediate treatment.

Mr. Ollett's reports show to what an extent the fewer houses of the West district are continually being overhauled as regards drainage. The work in the other districts is of a more mixed character, as the smaller table of returns as to general visits of inspection shows. My own inspections are

made in any and every part of the Borough, and are not specially detailed.

RETURNS AS TO STRUCTURAL ALTERATIONS.

			CentralandWest.	East.	S.M'rys.
Drains examined and tested			302	61	137
,, re-laid and amended	•••	•••	233	54	102
Interceptors fixed			76	44	15
Drain ventilation improved	•••		92	45	26
New w.c. apparatus provided			251	72	47
W.c. apparatus repaired			521	85	75
W.c. flushing power improved			539	42	54
D-traps removed		•••	76	12	I
New soil pipes fixed in old hous	es		119	10	15
Soil pipe ventilators enlarged			130	20	8
New main taps provided			219	ı	8
Waste pipes trapped			404 ·	23	16
Sanitary dustbins provided			247	183	51
Back yards paved or repairad			91	81	18
Sinks renewed or repaired			281	66	19
New sink waste				32	28
Safes provided under w.c	•••		_	5	15
W.c. cisterns fixed			196	- 1	21
Cleansing of premises	•••		259	17	3

The above refer to old or existing houses and are not tabulated for comparison, for they refer to part only of the work done by the Inspectors.

Besides the work specified in the above table many other useful sanitary improvements have been carried out, particularly the remedying of dampness by making roofs and walls watertight (49 in the East Ward), attending to eaves guttering and spouting, filling up below floors, especially in the Central Ward, where, from time to time, the ground water reaches a comparatively high level.

# RETURN AS TO GENERAL VISITS OF INSPECTION.

		East.	Central.	West.	S. M'ry's
	, Dwelling-houses	622	449	217	206
	Schools	27	13	_	20
	Dairies, Cowsheds, etc	85	37	4	21
Visits	Slaughter-houses and Butchers'	367	189	15	223
for Inspection	Shops Bakehouses	88	68	9	11
of	Fruiterers, Fishmongers, &c	243	1 <b>7</b> 9	23	34
	Stable and other premises	1181	655	189	598
	Factories, Workshops, and	421	452	24	80
Visits in co	Work-places onnection with Notifications	250	135	90	100
Premises in	n which Drains have been tested	92	157	260	137

# Notices Issued.

# EAST WARD.

	No. Issued.	No. com- plied with.	No. lapsed.	No. out- standing.
a Sec. 91 of Public Health Act	68	68		-
b Sec. 36 ,, ,,	20	20	-	-
c Sec. 41 ,, ,,	6	6	_	-
f Sec. 46 ,, ,,	15	15	_	
e Sec. 106 Eastbourne Improvement Act	ı	I		_
Totals	110	110		

# CENTRAL WARD.

			No. Issued.	No. com- plied with.	No. lapsed.	No. out- standing.
a Sec. 91 of Pul	blic Hea	lth Act	47	47	_	_
b Sec. 36	,,	,.	13	13	_	_
c Sec. 41	,,	,,	12	12	<del>-</del>	_
d Sec, 49	,,	11	2	2	-	_
f Sec. 46	,,	,,	4	4	_	_
e Sec. 106 Eas ment Act	tbourne	•		I		-
Tot	als		. 79	79	_	_

#### WEST WARD.

	No. Issued.	No. complied with.	No. lapsed.	No. out- standing.
a Sec. 91 of Public Health Act	2	2	_	
c Sec. 41 ,, ,,	6	_	_	6
g Sec. 34 Factory and Workshops				
Act	2	2	-	_
Totals	10	4		6

#### ST. MARY'S WARD.

	No. Issued.	No. complied with.		No. out- standing.
a Sec. 91 of Public Health Act	17	17	_	_
<i>b</i> Sec. 36 ,, ,,	7	7	_	_
d Sec. 49 ,, ,,	I	I	_	_
f Sec. 46 ,, ,,	ı	I	_	_
e Sec. 106 Eastbourne Improvement Act	ı	ı	_	_
j Factory and Workshops Act,	I	I	_	_
Total	28	28		

- a To abate Nuisances of various sorts, including overcrowding (Sec. 91 Public Health Act).
- b To provide proper closets, dustbins, etc.
- c To relay and repair defective drains.
- d To remove offensive accumulations.
- e To separate the water systems of closets from those for domestic use.
- f To cleanse, disinfect, &c., houses.
- g To lime-wash, &c., bakehouses.
- j To provide suitable accommodation in the way of sanitary convenience.

In addition to these Statutory Notices, 348 letters requesting amendments of premises were issued 121 of these were complied with, otherwise two and in some cases three notices in each case would have been necessitated, for when

the work required has been done as a consequence of these letters, notices have not been sent.

#### SANITARY CERTIFICATES.

During 1905, 50 new Sanitary Certificates were issued, that is to say in 50 houses, the up-to-date regulations for the Certificate were complied with. The numbers issued in the immediately previous years were 55, 91, 62, and 70 respectively. The total number now issued is 1218—a few of these have been second issues for the same house, but at all events many over a thousand houses have now been brought throughly up-to-date or over one in every four of the larger houses in the Borough. The remainder are well looked after and could in most cases obtain the Certificate for a small outlay.

Fifty-two old Certificates have been endorsed after thorough re-examination and re-testing: this is the largest number of endorsements in any one year.

The procedure after Certificates have been in existence for three years is to send copies of a circular to owners or occupiers, reminding them that three years have elapsed since the issue of the Certificate, and offering re-examination and re-testing. If the owner requires a totally new Certificate, then he must comply with the requirements now in force, but if he elects to have the old Certificate endorsed simply, then the soil-pipes, drains, etc., must be re-tested with the former tests and proved quite sound, and the fittings must be in good working order.

Imitation is the sincerest form of flattery and the value of the Sanitary Certificate of Eastbourne is now so well known in the sanitary world that there have been many imitations. It was a great thing for House Sanitation in general when these Certificates were introduced, and the requirements are kept up to such a pitch that the Certificate has been uniformly of real value. Unfortunately, this is not

so elsewhere, and tends to discredit a Certificate. This is one reason why the system is so often condemned.

One of the chief advantages of these Certificates is that it ensures a good system of drain-laying and plumbing in all work, whether for Certificate or not, because the men are accustomed to work for certificates. So that house sanitation in general is brought to a higher standard.

#### SCHOOL SANITATION.

All the Elementary Schools of the Borough have been frequently visited by myself, both as Medical Officer of Health and as Medical Officer to the Education Authority. They have been frequently visited by the Sanitary Inspectors and any defects noticed have been remedied. Most of the private Schools in the Borough have also been visited.

HOUSING OF THE WORKING CLASSES ACT.

No steps have been taken under this Act during 1905.

### REFUSE REMOVAL.

The same arrangements have been made and carried out as in recent years since the organization was transferred to my department—with the addition that the small part of the East Ward formerly attended to by a private collector of refuse was early in the year taken over by this Department and so brought under the same conditions as the remainder of the Borough.

Every house in the Borough has had its refuse removed once a week from January to June and from October to December, and during July, August and September, there has been a twice a week collection of Refuse. In some hotels and large houses the collection has been still more frequent.

Small houses have received as frequent attention as large, for the poorer the tenant, and the smaller the premises, the less convenience and safety there is in storing these offensive accumulations.

The Council commenced the twice-a-week summer collection of refuse in 1900, and since then, in connection with this collection of refuse in July, August, and September each year, I have given certain figures, year by year, as to the incidence of certain diseases affected by such refuse to a greater or less extent. Infantile Diarrhæa is especially connected with non-removal of decomposing refuse.

These figures have invariably shewn saving of life and prevention of disease since the more frequent removal of house refuse.

With the taking over of the remainder of the Borough in 1905 I am able to give still more striking figures as regards Infantile Diarrhœa.

CASES AND DEATHS IN JULY, AUGUST AND SEPTEMBER, OF VARIOUS YEARS.

	Average yearly during 5 last years of once-a-week refuse collection, 1895–1899 inclusive.	Average yearly during 5 first years of twice-a-week refuse collection, 1900–1904 inclusive.	For the year 1905. Whole borough cleared twice-a-week by Corporation, 1905.
Scarlet Fever	12.6	10.6	8
Diphtheria	13.6	8.8	10 (4 from outside
Enteric Fever	14.4	3*4	Borough)  4 (all importations)
Infantile Diarrhœa Deaths	31.8	13.4	2

The population having, of course, increased year by year, the returns are all the more noteworthy and the improvement more than the mere figures indicate.

The diseases above, and especially Scarlet Fever, are not wholly or specially dependent upon the presence of decomposing refuse, but under certain conditions are frequently so associated. In the case of Infantile Diarrhæa, however, the association is constant and hence the

extraordinary decrease of this ailment year by year coincident with better and more frequent refuse removal, the decrease being also maintained independently of varying meteorological conditions.

Flies are frequently the carriers of such infective matter as causes Infantile Diarrhœa. They abound in summer on offensive accumulations and then settle on food and food vessels. The crusade against offensive accumulations, including decaying house refuse, has a definite object, therefore, in the case of diseases such as Infantile Diarrhœa. It is amusing to see this theory of fly infection brought out from time to time as a "new" thing in medical and lay papers when many of us have been working to prevent fly infection for many years past.

The Destructor has been available throughout the year, and special arrangements have been made for it to be capable of destroying whole carcases of animals if necessary, such as in deaths from Anthrax.

The Borough is at present divided into nine districts for dust collection, each district being worked by a shoveller and two carters, the whole being under the direction of the Foreman. Occasionally extra carts are needed to complete the weekly collection, and in the summer ten extra men and six extra carts are permanently employed. The extra cost of the twice-a-week collection is roughly £100 a month.

The carts are not of the latest or best type and attempts to find suitable motor carts have failed.

# SLAUGHTER-HOUSES AND MEAT INSPECTIONS.

There are still but four Slaughter-houses in Eastbourne; three in the East Ward, namely:—The Crumbles, Latimer Road and Bourne Street Slaughter-houses; and one in St. Mary's Ward, namely:—Upwick Slaughter-house: these Slaughter-houses are all private. The definite abandonment of the scheme for a Public Abattoir led to the existing private Slaughter-houses being put into good working order

and they have been kept so during 1905. No complaints have been received in this department about them during the past year.

Most of the meat consumed in Eastbourne is slaughtered outside the Borough, either in the neighbourhood as at Langney, or at a distance such as London, and brought in daily by train. There are large wholesale establishments in the Borough.

It is advantageous in some ways to have but few Slaughter-houses, but as far as meat inspection is concerned, the meat being mainly brought from elsewhere, there is not much inspection possible of the meat in the carcase.

#### UNSOUND FOOD.

On seven occasions during 1905, unsound food was voluntarily surrendered, the instances being given below and once some organs of a pig were "seized" but no proceedings were taken.

The most serious case was that of some unsound brawn. In October a consignment of brawn arrived in Eastbourne and was sold from two shops, with the result that about 60 persons were known to have been taken ill and there may have been others. There were no fatal cases. The patients were mostly adults, fortunately brawn is not given to very young children as a rule.

The illness in each case depended for its severity on the amount of brawn eaten, and apparently there was no peculiarity of taste. There was no difficulty in getting at the cause of the illness, for the first series of cases reported to me were in patients who formed part of a supper party; those who ate the brawn were all affected, and were the only ones affected. Following cases elsewhere corroborated the diagnosis.

The symptoms were those of high fever and acute enteritis. Pain, vomiting, diarrhœa and pyrexia with its

usual concomitants, came on, not immediately, but after a few hours' interval, there being a short but distinct incubation period.

The brawn was not in tins or vessels of any kind. It came from a firm in Nottingham in paper packages in a box, and was in appearance similar to many other similar consignments from time to time received at the same shops.

Dr. Boobbyer, Medical Officer of Health, Nottingham, kindly made the necessary enquiries at Nottingham, and by tracing out similar cases at the same time there from brawn made at the same time, proved that the damage was done at Nottingham before the brawn was sent off to Eastbourne.

The remainder of the brawn was seized and either used by the Borough Analyst or destroyed.

The following report was received from Mr. M. Wynter Blyth:—

CHEMICAL LABORATORY,

36, Eastcheap, London, E.C.,

2nd November, 1905.

Dr. W. G. WILLOUGHBY.

DEAR SIR,

I beg to report on the samples of brawn sent to me on the 24th and 25th of October, 1905.

The samples will be referred to as No. I. (sent on 24th and known to have caused illness); No. II. (from same consignment as No. I. and No. III.) (sent on 25th per your Inspector).

The samples were found to be free from preservatives with the exception of common salt.

The samples were found to be *free from alkaloids* and general organic poisons.

The samples were found to be free from metallic poisons (arsenic a very slight trace, as is usual).

The samples were examined for ptomaines and poisonous albuminoids, both chemically and by administrating the extracted substances to animals. There were some slight signs of poisoning, but no large or definite poisonous substance was indicated in this manner.

Lastly, the samples were submitted to a microscopical and chemical examination, with the following results:—

Gelatine plate cultivations were made from various portions, some taken from the outside, some from half-way towards the centre, and some from the centre of each sample. In taking the inside samples the surface of the brawn was washed with corrosive sublimate solution and with absolute alcohol, and the cutting carried out with a sterile knife. Plates prepared from the inside samples gave nearly pure cultures of the coli group of organisms. The organisms actually separated (sub-cultures of which have been kept for future reference) varying from the true coli communis to an organism which has all the features of coli communis with the exception of the gas-producing powers.

The cultivations from the outside gave very numerous coli colonies, as well as many moulds and a certain number of white moist non-gelatine liquefying organisms, which were not further investigated.

The samples taken from near the edges of the brawn showed to a very considerable degree more organisms than those taken at the centre.

Thin sections cut from the brawn and suitably stained showed under the microscope numerous bacteria, and here, again, the number of bacteria appeared more numerous at the edge than in the interior.

Two samples out of six taken from the edge of

No. I., cultivated anærobically in milk, gave the reaction for B. Enteritidis Sporogenes. Samples from the interior of No. I. did not give this re-action, nor could it be got from any part of Nos. I. or III. The samples of brawn, from the appearance of the meat and the condition of the fat, had been, as far as could be judged, properly cooked, and when received had to my mind no appearance or smell of decomposition.

CONCLUSIONS.—From these results I conclude that the brawn had in all three instances been prepared from sound meat, and that the illness of those consuming it was not caused by ptomaines existing in the meat before conversion into brawn. I should say there is little doubt that the brawn had become contaminated with organisms, probably, if not certainly, of intestinal origin. This contamination was originally only on the surface, but the rapidly-growing coli organisms finding a suitable medium, grew through the brawn from the edge inwards until the whole mass was contaminated.

Whether the ill-effects which have followed from eating the brawn are mainly due to toxins excreted by the bacteria and contained in the bodies of the bacteria (as has been shown by Dr. Martin and others), or are due to direct bacterial infection of the consumers, or to both these causes, as is most probable, can be best judged by noting whether there was a definite incubation period between the consumption of the brawn and the first symptoms of illness. A definite incubation period would point to bacterial infection; a little or a very short period between the consumption and the illness would point to ready-formed toxines as the main cause of the sickness.

Yours faithfully,

M. WYNTER BLYTH.

Unsound Food Seized and Destroyed, but no Legal Proceedings taken.

One barrel of tripe, about 14lbs. (surrendered). Liver and organs of chest of two pigs, about 9lbs. (seized). Beef, 192lbs. (surrendered).

Ox kidneys, 5 ,, Fowls, 5 ,, Beef (skirt), 14lbs ,, Kidney knobs, 8 ,, Brawn, about 10lbs .,

Constant inspection shews that very little unsound food is exposed for sale in Eastbourne.

# Sale of Food and Drugs Act.

The very important duties under this Act have not been neglected in 1905. Unfortunately the variation in directions of the Board of Agriculture have not made the duties of sanitary authorities easy as regards that most important food, viz., milk. After with difficulty getting a minimum standard fixed for fat, viz., 3 per cent., the Board has in 1905 thrown it over by a circular stating that 3 per cent. must not always be fixed as a minimum, because occasionally, under certain circumstances, a cow may give a milk containing less fat. In my opinion the standard should be retained and such a cow rejected unless her milk were mixed with other better milk to bring it up to the standard.

There are evidences that the public is taking a greater interest in the adulteration of food, and a very excellent sign, at all events in Eastbourne, is that respectable retailers are as anxious as the Authority to sell pure food and do not view the Inspectors and the Authority as their enemies, but as their friends. It seems as if large wholesale firms are the chief offenders.

In November I gave by request a public lecture on the adulteration of food, which was reported and well received,

the interest of the Authority and its officials on the subject being, of course, only the interest of the public.

In my last report I dealt at length with "preservatives" in food, and I am glad to be able to report a great diminution in their use.

No sample of milk in 1905 contained any drug preservative at all—a record for Eastbourne, probably unequalled in any place of its size. This is the best evidence that no preservatives are required in milk.

Preservatives in small amount in other articles of food are not, as a rule, so serious, because invalids and children do not take them, and smaller quantities are taken.

Altogether 131 samples of foods were taken as detailed in the list given; 114 were absolutely pure and 4 contained sufficient unrevealed adulteration to warrant legal proceedings; 13 were slightly wrong, i.e., contained harmless colouring matter or minute quantities of preservatives. Thus the percentage of adulteration was only 3.05, as against a general one for England and Wales of from 7 to 9 per cent

#### MILK.

The samples were on the whole of a higher quality than usual.

Nineteen samples taken one day at the Railway Station on arrival of a train shewed that not one contained any preservative or colouring matter.

Four samples were certified by the Analyst to contain less than 3 per cent. of fat and to have been deprived of fat, viz., of 13 per cent., of 6.6 per cent., of 43 per cent., and of 10 per cent. respectively. All were taken before the Bench and the two former cases were dismissed, the Magistrates apparently differing from the Analyst, and in the latter two cases fines and costs of £3 and £1 14s. 6d. respectively were inflicted.

Of the 70 samples only four contained colouring matter. Including all samples, the morning 35 averaged a percentage of 3.66 of fat and 12.66 of total solids. The 35 samples of afternoon milk averaged a percentage of 3.69 of fat and 12.65 of total solids.

Forty-five of the samples were taken from wholesale consignments and averaged 3.8 per cent, of fat, and 12.79 per cent. of total solids.

Twenty-five of the samples were taken from retail vendors, and averaged 3.5 per cent. of fat. and 12.52 per cent. of total solids.

There was thus a slight decrease in the value of the milk from its wholesale bulk to its retail sale.

Seven of the eleven samples of butter contained a small amount of boric acid preservative, and so did the two samples of cream, the largest amount of the preservative was 0.31 per cent.

All the remaining 114 samples were certified as genuine and in only four cases altogether or a percentage of 3.05 was there any tampering with the food except for colouring matter and small quantities of preservative.

To have had but one bad instance of food adulteration in 131 samples is a most satisfactory record and the decrease in the use of preservatives in Eastbourne is most gratifying and conducive to the public good health.

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# ANALYSES, 1905.

	S1		ned as	
Foodstuffs, etc.	Samples taken.	Genuine	Adulter- ated.	Proceedings.
Milk	. 70	62	8 {	I deprived of 13 %, of fat. Case dismissed.  I deprived of 6.6 %, of fat. Case dismissed.  I deprived of 43 %, of fat. Fined £2 4s. 6d. and 15s. 6d. costs.  I deprived of 10 %, of fat. Fined £1 and 14s. 6d. costs.  4 contained colouring matter.
Butter	. 11	4	7 {	I contained '24 % of boric acid.  I ,, '18 % ,, '1  I ,, '21 % ,, '1  I ,, '17 % ,, '1  I ,, '25 % ,, '1  I ,, '31 % ,, '1  I ,, '24 % ,, '1
Brandy	. 10	10	-	3 samples were specially taken (not under Food & Drugs Act).
Cream	. 2	-	2	1 contained '12 % and the other '30 % of boric acid.
Cornflour Oatmeal Arrowroot Pepper Carron Oil Olive Oil	5 2 4 4 3 1 1 1 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1	4 5 2 4 2 4 3 1 1 1 1 1 2 2 1 1 1 1 1 1		30 10 Bolic acid.
Totals .	. 131	114	17	

# CELLAR DWELLINGS.

There are practically none in Eastbourne, and no proceedings have been necessary.

#### OVERCROWDING.

Only one serious case of overcrowding has been discovered during the year and that was a case combined with great poverty. The few other cases that have had to be dealt with have only required verbal notice for abatement. In previous reports I have detailed the gradual lessening of the number of occupants per house in Eastbourne owing to the extensive building operations.

#### OFFENSIVE TRADES.

The four "offensive trades" in Eastbourne have given no special cause for complaint in 1905. Fried fish shops and marine stores are mild varieties of "offensive trades," fortunately.

#### MORTUARY.

The control of the new Mortuary, started and at first managed by this department, has now been handed over entirely to the Police.

#### PUBLIC BATHS.

During 1905 the Public Baths in Seaside continued to be much appreciated, as the figures below shew. There are nine baths for men and three for women. In addition to the numbers shewn below, very many persons used the shower bath and the lavatories.

Year.	Men.	Ва	ths used by- Women.	_	Children.
1905	10,800	•••	2,976	•••	578
1904	10,773	•••	2,834	•••	561
1903	9,110	•••	2,415		592

The Old Town Ordinary and Swimming Baths were opened on January 5th and the extent of their use is shewn by the figures below. There are 12 baths for men and 3 for women, excellently fitted up with the newest appliances.

The swimming bath, lined with white tiles and glazed bricks, is 6oft. long and is provided with water from a well on the premises, so that the water can be changed frequently at a minimum of expense. There are 34 dressing boxes.

The figures for 1905 were:

Men.

Baths used by—
Women.

Children.

Swimming Bath ... 5,902 ... 597 ... 4,146

(And Season Ticket holders).

Ordinary Baths ... 3,057 ... 522 ... 689

There are special terms for school children, and, thanks to the interest taken by Mr. Sogno and other teachers in elementary schools, and by the Swimming Club officials, swimming has been taught successfully to many children during the year. Certificates were issued to swimmers who only learnt in 1905 at a display held in the late autumn.

# Dairies, Cowsheds, and Milkshops.

I submit below a table showing particulars as regards these.

DAIRIES, COWSHEDS & MILKSHOPS ORDERS OF 1885-6.

	East Ward.	Central Ward.	West Ward.	S. M'ry's Ward.	Total.
	-				
Number of Dairies on Register	6	8	3	I	18
,, ,, Cowsheds ,,	3	_	2	3	8
,, ,, Milkshops ,,	42	9	5	8	64
Infectious Diseases among Employees	_	_	-	_	_
Infectious Disease on Premises	_	_	_	_	_
Notice to Abate Nuisance	-	- 1	-	- 1	_
Number Registered in 1904	8	-	_	_	8
Number removed from Register in 1904	3	-	_	_	3

The Cowsheds, etc., of the Borough are well kept, without much trouble to the Authority.

In my last report I remarked that supervision of those outside the Borough was much needed, for, active as the officials of the Rural Districts were, the Cowsheds were too scattered for the work to be effectively done. I suggested that legislation was advisable on the lines of allowing the officials of those districts which consume the milk to examine and attend to the sources of supply.

Two of the Eastbourne members of the County Council of East Sussex took this matter up and the idea of a Borough Medical Officer going out into the rural districts to examine Cowsheds, apparently stirred others into action. Dr. Stott, Medical Officer of Health for the districts around Eastbourne, has kindly with his Council taken steps to get a sort of Sanitary Certificate issued for Cowsheds deserving such a Certificate. The regulations and certificate were only finally framed towards the end of the year, but I hope next year to report on the success of Dr. Stott's scheme. An idea of a County Council examination of Cowsheds has also followed this very creditable start on the local part and so there is a chance of more interest being taken by the public in the condition of Cowsheds. Hitherto there has been too much talk of boiling and sterilizing rather than looking into sources of supply.

Legal Proceedings for the Year 1905.

No.	Nature of Offence.	Date of Hearing	Result.
ı	Selling milk deprived of 13 per cent. of fat	Mar. 17	Case dismissed
2	Selling milk deprived of 6.6 per cent, of fat	" "	31 23
3	Selling milk deprived of 43 per cent. of fat	July 28	Fined £2 4s. 6d. and 15s. 6d.
4	Refusing to allow Inspector to enter premises to examine in consequence of complaint of nuisance	. 1	Order made on Defendant to admit the Inspector for the purpose of examining
5	Keeping horses, dogs, and pigeons in such a manner as to cause a constantly-recurr- ing nuisance		Order made to discontinue keeping horses, dogs, and pigeons on the premises and pay 10s. 6d. costs
6	Selling milk deprived of 10 per cent. of fat	Dec. 29	

# Infectious Diseases.

	East Ward.	Central Ward.	West Ward.	S. M'ry's Ward.	Total.
Number of cases notified	89	22	7	24	142
Number removed to Sanatorium	64	6	15	14	99
*Number of Houses Disinfected	49	44	33	17	143

<sup>\*</sup> This Includes houses disinfected after Phthisis, Measles, and Cancer also.

# Office Work during 1905.

Calls and Communications received and entered		1806
Letters and Reports written		976
Entries made in Inspector's Journal		533
Entries made in Register of Defects and Nuisances		204
Notices Issued		227
Entries made in Register of Samples taken		128
Returns of Inspector's work made to Committee		12
Entries made in "Report Book" on Infectious Cases	s	142
Monthly Returns on the Health of Eastbourne	to	
Members of Sanitary Committee and others		216
Entries made in Voluntary Sanitary Register		50
Sanitary Certificates issued		50
Sanitary Certificates endorsed	• • •	52
Entries made in Register of Cowsheds and Dairies	• • •	II
Certificates of Registration issued for the same	• • •	11
Entries made in Register of Bakehouses	•••	61
Entries made in Register of Slaughter-houses		4
Licenses issued for the same		4
Entries made in Register of Unsound Food		5
Entries made in Register of Letters requesting Amer	nd-	
ments		348
Letters written requesting Amendments to be made		348
Samples of Eastbourne Water taken for analysis	by	
Public Analyst	•••	7

Samples of Water taken	and	Anal	ysed	by	Med	ical
	•••	•••	•••		••	•••
Cleansing Certificates writt	ten				••	
Passes issued for Parents a	ind Fr	iends	to v	isit l	Patie	ents
10 .						
_			• • • •			•••
Q - 11 4 :	C TT		D . (			
Collection	oi H	ouse	Rei	use.		
16,897 Loa	ds we	ere co	llect	ed.		
	-					
Premises Receiving	Cons	stant	Ins	pect	ion	and
Attention	durin	g th	e Ye	ar.		
EA	ST W	ARD.				1905.
Number of Bake-houses						20
,, Cowsheds						3
,, Farm Yards						2
,, Dairies and Mi	lkshops					48
, Private Stables						69
,, Livery Stables						10
,, Piggeries						3
,, Slaughter-hous	es					3
,, Offensive Trade	es					5
CENTRAL A	AND W	EST '	WARI	os.		
Number of Bake-houses						19
,, Cowsheds						2
,, Farm Yards						2
,, Dairies and Mi	lkshops					22
,, Private Stables						187
,, Livery Stables				•••		24
,, Piggeries						3
,, Slaughter-hous	es					_
, Offensive Trad	es	•••	•••		•••	_
ST. M	ARY'S	WAR	D.			
Number of Bake-houses		•••				7
" Cowsheds				•••		4
,, Farm Yards			•••			4
,, Dairies and Mi	ilkshops					9
,, Private Stables						80
" Livery Stables	•••					8.
" Piggeries	•••					5
,, Slaughter-hous	es			•••		1
,, Offensive Trad	es	•••	•••	•••		_

# Factory and Workshop Acts.

In accordance with the Home Office instructions I submit various tables as to the working of these Acts.

# FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORK.

#### I.—INSPECTION.

	Number of				
Premises.		Inspections.	Written Notices.		
Factories (Including Factory Laundries).		66	10		
Workshops (Including Workshop Laundries).		510	55		
Workplaces		494	12		
Homeworkers Premises		28	-		
Total		1098	77		

#### II.—DEFECTS FOUND.

	Number	of Defects.
Particulars.	Found	Remedied.
Nuisances under the Public Health Acts:—		
Want of cleanliness	81	76
Want of Ventilation	19	11
Overcrowding	14	13
Want of drainage of floors	5	3
Other nuisances	33	29
Sanitary accommodation insufficient	22	9
,, ,, unsuitable or defective	108	102
Offences under the Factory and Workshop Act	I	I
Giving out work to be done in premises which were infected		
Total	283	244

#### III.-OTHER MATTERS.

Class.	Nun	nber.
Matters notified to H.M. Inspectors of Factories:—  Failure to affix Abstract of the Factory and Workshop Act (Sec. 133)	13	33
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (Sec. 5). Notified by H.M. Inspector	_	
Underground Bakehouses (Sec. 101):—		
In use during 1905	1	0
Certificates granted in use at the end of 1905	1	0
	Num	ber of
Homework:  Lists of Outworkers (Sec. 107):—	Lists.	Out- workers.
Lists received	18	32
Homework in unwholesome or infected premises :—	Wearing Apparel.	Other.
Notices prohibiting homework in unwholesome premises (Sec. 108)	*****	
Cases of infectious disease notified in homeworkers' premises	_	_
Workshops on the Register at the end of 1905	48	34
Bakehouses	4	15
Total number of Workshops on Register	52	29

#### Bakehouses.

The various bakehouses of the Borough have received full attention during the year. They have all been whitewashed, &c., in May and November.

I submit a list of the various workshops and workplaces in the Borough arranged according to districts.

There are also very many small premises hardly possible to be included among workshops and workplaces which have also received attention by myself and by the Sanitary Inspectors of each District.

EAST WARD.

Business.				Factory.	Workshop	Workplace
Bakehouses		•••		I	20	_
Boat Builders	•••				ı	
Basket and Trunk Makers				_	1	-
Bootmakers				_	10	
Breweries and Bottling Stores	5			I	_	_
Brickyards						I
Carpet-Beating Works	•••			2	_	_
Carpenters, Cabinet Makers,	etc.			_	11	
Coach Smiths, Trimmers, etc				I	_	_
Clay Pipe Manufacturers				_	I	_
Confectioners				_	1	_
Cycle Makers and Motor Car				ı	2	
Destructor Works						I
Dressmakers and Milliners	•••	•••		_	8	_
Electricity Works			)	ı	_	_
Engineers	•••	•••		3	1	_
Electro-Platers				I	_ /	_
Firewood Works				I		_
Fish Fryers		•••		- )	5	_
Gas Works		•••				ı
Laundries		•••		5	21	_ (
Mineral Water Manufacturers			)	ı		_
Marine Stores	•••	•••		eparti.	_	4
Market Gardens and Nurserie		•••		_	_	4
Plumbers and Gas Fitters				_	ı	
Photographers					I	_ 1
Printers				2		
Restaurants	•••	•••		_	_ \	4
Saddlers	•••	•••		_	2	
Stables				_	_	17
Shoeing and General Smiths	•••	•••		_	7	
Stonemasons		•••		_		ı
Timber Merchants		•••		2		
Tailors	•••			_	9	_
Upholsterers	•••			_	ı	_
Watch and Clock Repairers		•••		_	3	_ :
Totals				22	106	33

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# WEST AND CENTRAL WARDS.

Business.		Factory.	W'rkshop.	W'rkplace.
Basket and Trunk Makers		 	2	_
Bakers and Confectioners		 _	20	_
Bookbinders		 <u> </u>	1	_
Bootmakers and Repairers		 I	26	_
Brewery		 I	_	_
Builders and Builders' Merchant	ts	 3	10	3
Carpenters, Cabinet Makers, &c		 5	29	1
Coach Builders, Trimmers, and	Smiths	 -	6	_
Carpet Planner		 - )	ı	_
Corset Makers			2	
Cutlers		 r	I	_
Cycle Makers and Repairers		 ı	9	_
Dairymen		   -	_	II
Dentists		 _	8	
Dress and Mantle Makers		 - 1	32	_
Dyers and Cleaners		 - (	2	_ /
Electricians			2	- 1
Engineers		 - 1	1	_
Fancy Needlework		 - 1	I	_
Fish Frying		 	_	2
French Polishers		 -	2	-
Fruiterers		 \	- 1	4
Gasfitters		 -	1	- 1
Gymnasiums		 -		2
Grocery Stores		 	- 1	6
Hairdressers and Wig Makers		 - 1	7	- 1
Jewellers and Watchmakers		 - 1	9	_
Laundries		 ı	2	
Leaded Light Works		 _	2	

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# WESΓ AND CENΓRAL WARD—Continued.

Busin	ness.			Factory.	W'rksh <b>o</b> p.	W'rkplace.
Milliners			•••	 _	8	_
Mineral Water Factory	7			 ī	_	_
Nursery Gardener	•••	•••	•••	 -	_	ı
Painters				 -	10	_
Photographers	•••	•••	•••	 _	9	_
Piano Repairers				 _	4	_
Picture-Frame Makers			•••	 _	7	_
Plumbers, &c	•••	•••		 _	17	_
Printers				 IO	ı	_
Relief Stampers	•••		•••	 - /	ı	- 1
Restaurant and Hotel	Kitche	ns	•••	 _	_	16
Saddlers		•••		 - 1	2	- 1
Scale Makers		•••		 - 1	ı	_
Sign Writers			•••	 _	3	_
Smiths, Fitters, &c.			•••	 - 4	20	_
Stables		•••	•••	 _	_	27
Stonemasons	•••	•••	•••	 I	-	-
Tailors			•••	 _	16	_
Telephone Exchange		•••	•••	 _	_	I
Umbrella Makers				 _	2	_
Undertakers	•••		•••	 _	2	_
Upholsterers and Bedd	ing Ma	akers		 1	14	_
Water Works (Pumpin	g Stati	on)	•••	 1	_	-
Window Blind Maker				 -	ı	_
Wheelwright	•••			 _	I	-
Wood Carvers and Te	ırners			 2	ı	-
TOTAL		•••	•••	 15	112	44

90 ST. MARY'S WARD.

	Busines	S.			Factory.	W'rkshop.	W'rkplace.
Bottling Stores					I	-	_
Breweries					ı	_	_
Bootmakers			•••		-	5	_
Carpenters, Cab	inet Mak	ers, &c.			I	10	- 1
Coach Smiths	•••		•••		_	I	-
Cycle Works					-	2	_
Dressmakers and	d Milliner	rs			-	6	_
Flour Mills (Ste	am)				I	_	_
Firewood Works	S	•••			I	_	_
Furniture Stores	•••				_	_	I
Laundries					2	8	_
Mineral Water N	Ianufacti	ırers			2	_	_
Nursery Garden	s				- 1	_	2
Plumbers					_	7	_
Saddlers	•••	•••				2	_
Shoeing and Ger	neral Smi	iths			_	3	
Stables			•••		_	_	7
Stonemasons		•••		•••	H -	ı	ı
Tailors	•••	•••	•••		_	4	_
Upholsterers					-	I	-
Wheelwrights					-	3	-
TOTAL	•••				9	53	11

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# APPENDIX.

Local Government Board and other Tables.

	ths at all	nging to strict.	Rate,	13	11.66 8.72 11.31 11.37 10.72 11.75 11.75 11.75 11.75 11.75	69.01
	Nett deaths at all	ages belonging to the District.	Number.	12	452 396 3396 351 464 456 485 485 485 485 485 485 485 485 485 485	496
YEARS.		H P	in Fublic Institutions beyond the District.	II	NOTE —The Hospital for Infectous Diseases, the General Hospital, and the Union Workhouse Infirmary re in the District, so that this column fractically nik.	e e
VITAL STATISTICS OF WHOLE DISTRICT DURING 1905 AND PREVIOUS YEARS.	Deaths of	Non-resi- dents regis-	Public Institutions in the District.	OI	669 588 33 33 33 17 17 17 17 16 16 16 16 16 16 16 16 16 16 16 16 16	56
905 AND	Total		Institutions in the District.	6	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	26
DURING 10	District.	At all ages.	Rate.	σ.	13.45 1149 12.05 13.56 11.78 11.78 11.0 10.49	11.55
DISTRICT	ered in the	At all	Number.	7	\$21 454 399 494 566 566 566 571 495 495 495 495	522
Wноге I	Total Deaths registered in the District	Under 1 year of age.	Rate per 1,000 births registered.	9	133 1105 1105 1106 139 145 121 1017 927 11779	6.101
STICS OF	Total De	Under 1 y	Number.	55	122 105 130 130 130 101 101 101	
AL STATI	Births.		Rate.	4	23.6 20.5 20.5 20.5 20.5 20.5 20.5 20.5 20.5	18.34
VIT	Bir		Number.	3	917 917 919 886 886 936 907 907 900 900 900	853
		Population	to middle of each year.	23	38,750 39,500 41,000 41,750 41,750 43,500 43,500 44,250 44,250 45,000 45,700 45,700 45,700 45,700 45,700 45,700 45,700 45,700	40,500
			Year.	I	1895 1896 1897 1899 1900 1901 1902 1902 1903 1904 Averages for years	1905

TABLE II.
Vital Statistics of separate Localities in 1905 and previous years.

d a	Deaths under I year.	80	28	28	31	38	23	18	91	57	21	2	15
s WAI	Deaths at all Ages.	162	150	149	155	189	162	160	OII	131	121	148	113
-St. Mary's Ward	Births registered,	237	202	221	326	226	207	219	205	197	227	216	225
5.—ST.	Population estimated to middle of each year.	7,755	8,012	8,268	8,525	8,782	9,038	9,388	10,942	11,212	11,393	9,331	11.703
	Deaths under I vear.	∞	S	H	r.	1	C/I	C)	7	4	co	3.4	60
-West Ward.	Deaths at all Ages.	47	36	34	41	41	44	49	49	46	39	45	358
WEST W	Births registered.	32	SI	43	4I	3.5	56	56	40	56	35	36	35
4	Population estimated to middle of each year.	6,139	6,215	6,291	6,367	6,443	6,519	6,657	6,146	6,206	6,227	6,321	6,367
D.	Deaths under I year.	33	14	61	22	20	22	13	15	Io	9	17	IO
	Deaths at all Ages.	131	73	74	98	. 107	100	III	II5	89	95	26	109
ENTRAI	beret-iger edirths.	202	208	181	191	158	146	164	IZI	111	120	157	94
3.—C	Population estimated to middle of each year.	10,786	118,01	10,836	10,860	10,885	10,980	766,01	9,738	9,748	9,773	10,534	9,829
	Dearhs under I year.	19	58	50	72	78	19	19	99	59	59	62	59
WARD.	Deaths at all Ages.	131	195	142	200	229	195	178	246	229	209	195	216
-EAST	Births registered.	446	458	441	306	517	510	498	541	563	581	506	499
01	Population esti- mated to middle of each year.	14,070	14,462	14,855	15,248	15.640	16,033	16,488	17,424	17,834	18,357	16,041	18,601
CT.	Deaths under I year.	122	105	98	130	136	108	94	IOI	26	89	108	87
Distri	Deaths at all Ages.	521	454	399	464	266	Sor	498	541	495	480	494.9	496
IWHOLE DISTRICT.	Births registered.	216	616	886	934	936	892	206	206	900	696	916	853
I.—W	Population estimated to middle of each year.	38,750	39,500	40,250	41,000	41,750	42,500	43,500	44,250	45,000	45,750	42,225	46,500
Names of Localities.	Year.	5681	9681	7681	8681	6681	ообі	1061	2061	г9о3	406I	Averages of years 1895 to 1904	3061

There were Twenty-Six Deaths Institutions of Non-Residents,

TABLE III.

Cases of Infectious Diseases notified during the year 1905.

ed to	4 ;	St. Mary's Ward.	::9::8::::	15
remov each lo	, ω .l	West Ward	; ; H ! ! 4 ! ! ! ! ! !	25
of cases	o p	Centr'l Wa	: : 2 : : 5 : : : : : :	17
No. of cases removed to Hospital from each locality.	н :	East Ward	:::71 24 :: 8 :: :: ::	62
n each	4 ;	St. Mary's Ward.	: :0 : 1 0 : 1 1 1 1 1 1 1 1 1 1 1 1 1 1	24
tified in	ω .l	West Ward		7
ases notifie locality.	η p.	Centr'l Wa	: : አ፡ : አ፡ ፡፡ : : : : : : : : : : : : :	22
Total cases notified in each No. of cases removed to locality.	н 1	East Ward	: ::0 ::2 4 :: 4 :: : : :	68
		65 and upwards.	;;;;Q;;;;;;;	Q
istrict.	ķ	25 to 65.	: : 0 : 4 : : 1 : : 0 :	34
hole D	s—Year	15 to 25.	: : w : w 4 : H : : : :	II
ed in w	At Ages—Years.	\$1 01 S	: ::0 : 4 % : c : : : :	75
Cases notified in whole District.	Į	. S of I	::0:0	16
Case		Under 1.	:::::«H:::::	4
		At all ages.		142
	Notifiable Diseases.		Small-pox Cholera I Diphtheria Membran us Croup Erysipelas Erysipelas Typhus Fever Typhus Fever Relapsing Fever Relapsing Fever Continued Fever Plague	Totals

TABLE IV.

Weekly Notifications of Infectious Diseases, 1905.

	Week.		Small-pox.	Diphtheria.	Erysipelas.	Scarlet Fever.	Typhoid Fever.	Puerperal Fever.	Totals.
No.	Date of F	Ending.	Sma	Dipl	Ery	Scarl	Ty	Pue	Ĭ
1 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 23 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52	January  "" February  "" March  "" April  "" May  "" June  "" July  "" November  "" November  "" December  "" "" "" "" "" "" "" "" "" "" "" "" "	7 14 21 22 18 25 15 229 6 13 220 27 10 17 24 1 1 18 25 22 29 6 13 22 20 27 10 17 24 1 1 18 25 22 229 5 12 10 15 22 29 5 12 12 19 16 22 29 5 11 18 25 29 16 23 30 7 14 21 228 44 11 11 18 25 29 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 16 23 30 17 2			2 4 2 1 1 1 1 1 1 1 1				2 25 41 1 2 2 1 3 2 1 4 5 2 3 3 5 2 2 1 2 4 5 2 3 2 1 3 2 2 1 27 10 4 3 6 3 3 9 4 5 6
	Total	s		31	35	69	5	2	142

TABLE V.

Notifications of Infectious Disease. Returns for 1901-1905.

		Year.	31	69	5	61	35	÷	:		142
3		4	9	46	I	:	6	:	:	:	62
	1905.	3	OI	00	4	:	Ŋ	:	:	:	27
		0	IO	12	:	(1)	6	:	:	:	33
		I	S	3	:	:	12	:	:	:	8
		Year.	38	64	∞	4	23	:	:	:	137
		4	14	38	(1)	н	IO	:	:	:	65
	1904	8	∞	4	I	н	Ŋ		:	;	19
		0	4	13	01	:	01	:	:	:	21
		н	12	6	3	01	9	:	:	:	32
		Year.	44	44	7	01	20	:	I	:	118
		4	6	IO	8	:	S	:	н	:	28
	1903.	3	12	4	I	I	S	:	:	:	23
		0	6	12	01	:	9	:	:	:	29
		н	14	18	н	I	4	:	:	:	38
		Year.	51	102	9	rΩ	30	:	I	01	197
		4	12	28	3	3	IO	:	:	:	56
	1902.	8	r.	OI	н	Н	7	:	:	:	24
		0	II	40	I	:	S	:	:	I	58
ı		н	23	24	н	I	00	:	I	I	59
ı		Year.	55	901	25	:	19	:	н	:	306
		4	61	99	4	:	3	:	н	:	93
	1901,	8	13	56	OI	:	∞	÷	:	:	57
I		0	9	7	01	:	(1)	i	÷	:	17
		н	17	7	6	:	9	:	:	:	39
	YEAR.	Quarter,	Diphtheria	Scarlet Fever	Enteric Fever	Puerperal Fever	Erysipelas	Relapsing Fever	Membranous Croup	Small Pox	Total

ate fo	11	"	"	"
Sickness-rat	11	23	"	
n, 39,500)—5'64.	40,250)-5'29.	41,000/-346.	41,750,-3,76.	42,500) - 3 48.
population,	"	1,1	11	33
for 1896 (estimated	3.3	11	33	:
1896	1897	1898	1899	1900
ate for	11	"	"	"
Sickness-r	:	33		

, 43.500) -4.74.	44,250) -4'45.	45,000)2.62.	45,750)-2.99.	46,500)-3.05.
d population,	,,	,,	,,	33
stimate	"	33	"	"
1901	1902	1903	1904	1905
for	2		•	
Sickness-rate for 1901 (e	11	13	11	,

TABLE VI.

Table shewing the number of Deaths from the seven principal Zymotic Diseases in the 10 years 1895-1904 and in the year 1905.

55.	Death-	00.0	01.0	0.05	61.0	0.043	0.021	0.043	0.40	<b>:</b> -
1905.	Deaths.	:	Ŋ	П	6	C)	Ħ	Ø	30	0,40
	Decennial Average.	2.0	2.9	9.0	0.6	1.9	3.0	1.92	2.15	91.1
	1904	:	н	H	ιν	(1	:	1.5	42	0.25
	1903	:	:	:	56	61	က	Ŋ	36	20.1
	1902	:	61	н	61	8	I	7	33	0.75
	1901	:	:	:	6	က	8	39	4	10.1
	1900	:	:	:	4	8	4	23	34	5.04 0.69
	1899	:	7	н	23	6	4	52	96	
	1898	:	50	н	63	II	4	46	84	1.82
	1897	:	:	:	8	18	:	23	4	26.0
	1896	:	91	н	N	9	6	25	59	1.33
	1895	O)	4	н	14	4	61	36	63	obn- 
		:	:	:	:	:	:	:	:	 -ndod
			:	:	:	. :	:	:	:	1,000
	Disease.	:	:	÷	:	:	÷	:	:	te per
	Dise	:	:	: ::	Cough	:	/er	:	Totals	eath-ra
		Small-Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Enteric Fever	Diarrhœa		Zymotic Death-rate per 1,000 population
		Smal	Mea	Scarl	Who	Diph	Ente	Dian		Zym

# TABLE VII. Estimated Population, 46,500.

	1905.	ıst Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year.
RTH	Males	93 220 18.93	116 88 204 17.55	112 121 233 20'04	102 94 196 16.86	457 396 853 18:34
VOTIFICATIONS	Diphtheria Erysipelas Small-pox Scarlet Fever Enteric Fever. Puerperal Fever Membranous Croup Total Sickness-rate per 1,000, per annum	5 12 — 3 — — 20 1'7	10 9 — 12 — 2 — 33 2.8	10 5 8 4 — 27 2°3	6 9 46 1 — 62 5°3	31 35 69 5 2 — 142 3'05
DEATHS.	Males Females Fortales On-Residents Corrected Total	82 82 164 7 157 25 6 5 53 75 14'11 13'59	58 80 133 10 128 27 3 66 39 11.87 11.01 132	57 50 107 16 91 21 3 4 41 38 9.20 7.83 94.5	51 62 113 15 98 14 9 449 37 9'72 9'0	248 274 522 48 474 87 20 16 209 189 11'22 10'19
CAUSES OF DEATH, &C.	Zymotic Diseases — Seven principal Zymotic Diseases Other Zymotic Diseases. Dietic and Parasitic Diseases	6 12 2 10 6 6 10 1 1 4 4 5 11 1 3 3 3 7 2 3	3 10 14 15 3 7 6 6 4 1 1 5 16 10 3 3 1 1 3 3 6 6 1 8 8 2 1	4 2 2 9 4 4 14 1 3 6 6 2 2 10 6 6 1 2 2 4 4 2 2 9 9 2 9	6 1 9 3 7 7 7 7 7 7 7 7 7 7 7 7 12 2 11 1 3 3 2 1 1 1 7 2 4	19 25 5 42 13 56 1 14 25 26 12 23 95 76 33 95 16 3 97
METEOROLOG	Atmospheric Pressure, inches (corrected)  Air Temperature Earth Temperature, Mean Sea Total Rainfall (inches) Bright Sunshine, hours recorded Wind, prevailing direction	30'963 29'100 43'3 55'6 26'2 42'3 6'94 315'6 S.W.	30'719 29'218 52'6 71'0 33'0 53'5 6'96 564'8 S.W.	30'349 29'338 60'6 77'0 46'6 62'3 7'77 580'9 W.	30'852 28'864 45'8 59'5 30'0 48'1 8'43 219'2 W.	30'963 28'864 50'6 77'0 22'0 51'6 30'10 1680'5 S. W.

TABLE VIII. Causes of, and Ages at, Death during Year 1905.

	Death	Deaths at the subjoined occurring in or	ubjoinec ing in o	oined ages of in or beyond	"Residents" whether the District.	ents" w		Deaths c belongi occurring	Deaths of all ages of "Residents" belonging to Localities, whether occurring in or beyond the District.	of "Resalities, wo	idents" hether District.	Total deaths whether of Residents or non " Resi-
Causes of Death.	All ages.	Under I year.	r and under 5.	5 and under 15.	rs and under 25.	25 and under 65.	65 and up- wards.	East Ward.	Central Ward.	West Ward.	St. Mary's Ward.	
M	61	ന	4	ις	9	7	∞	6	OI	II	12	13
Searles Fever						,				-		
Measles	אי	•	א	:	:	:	:	n	01	:	:	ı
Whooping-cough	6	7	OI	:	:	:	:	ν.	н	:	<i>с</i> о	:
Diphtheria and Membranous Croup	Ø	:	н	:	•	H	*	61	*	*	:	3-4
Enteric Fever	I	:	:	:	ı	:	:	н	*	:	:	H
Epidemic Influenza	9/	0	:	:	н	9	7	אט	:	4	7	8
Diarrhœa	0	61	•	•	*	•	•	•	н	:	н	*
Enteritis	4	4	•	•	•	•	•	н	•	01	H	н
Puerperal Fever	I	:	:	:	:	н	:	:	н	•	:	ı
Erysipelas	4	6)	:	:	:	Ħ	Ħ	6)	•	:	0)	
Other Septic Diseases	H	Ħ	:	:	:	:	:	н	:	:	:	:
Phthisis (Pulmonary Tuberculosis)	40	ĭ	:	H	7.0	27	9	16	т4	9	4	7
Other Tubercular Diseases	12	8	01	0	I	4	:	9	01	н	3	m
Cancer, Malignant Disease	51	:	:	:	Н	29	21	J 16	14	0,	12	6
Bronchitis	30	9	I	•	:	9 (	17	13	9	8	∞	4
Pneumonia	33	∞	61	8	н	2 8	or	81 81	7	<b>(</b>	7	m
Pleurisy	и	:	:	:	•	n	Ø	01	н	:	8	0
Other Diseases of Respiratory Organs	ນ	:	Ħ	:	:	0)	01	m	:	:	N	:
Alcoholism, Cirrhosis of Liver	∞	•	•	:	:	9	61	က	'n	•	:	0
Venereal Diseases	:	•	•	•	:	•	•	•	:	:	:	:
Premature Birth	25	25	:	:	:		:	17	9	н	н	:
Diseases and Accidents of Parturition	n	:	:	•	•	3	:	က	:	:	:	I
Heart Diseases	9	:	н	4	:	23	32	23	15	7	15	15
Accidents	7	:	н	н	:	61	3	61	H	61	01	:
Suicides	9	:	:	:	8	I	3	П	:	4	H	I
Total of above	330	19	91	10	12	125	106	143	92	9	71	55
All other causes	991	56	4	3	9	52	75	73	33	15	45	24
All causes	496	87	50	13	18	177	181	216	109	59	113	26
Non-residents in Institutions	56	:	:	က	3	13	7	•	:	:		•
All causes and persons	522	87	80	J 16	21	190	188	1 *	:	:	:	:



TABLE IX.

INFANTILE MORTALITY DURING THE YEAR.

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	CAUS	STAN	ALL Catified	Uncertified		Common Infectious Diseases	Small-	Chicken-pox	Measles	Scarlet Fever	Diphtheria:	Whooping Cough	Diarrhoeal Diseases—	Diarr	Enter	Gastritis,	Wasting Diseases— Premature Birth	Cong	Iniur	14/00/	Atro	Tuberculous Diseases—	Tube	Tube	Othe	Erysipelas	Syphilis	Rickets	Meningitis (not	Convulsions	Bronchitis		Decimonia	I neam	Suffocation, over ay ins	

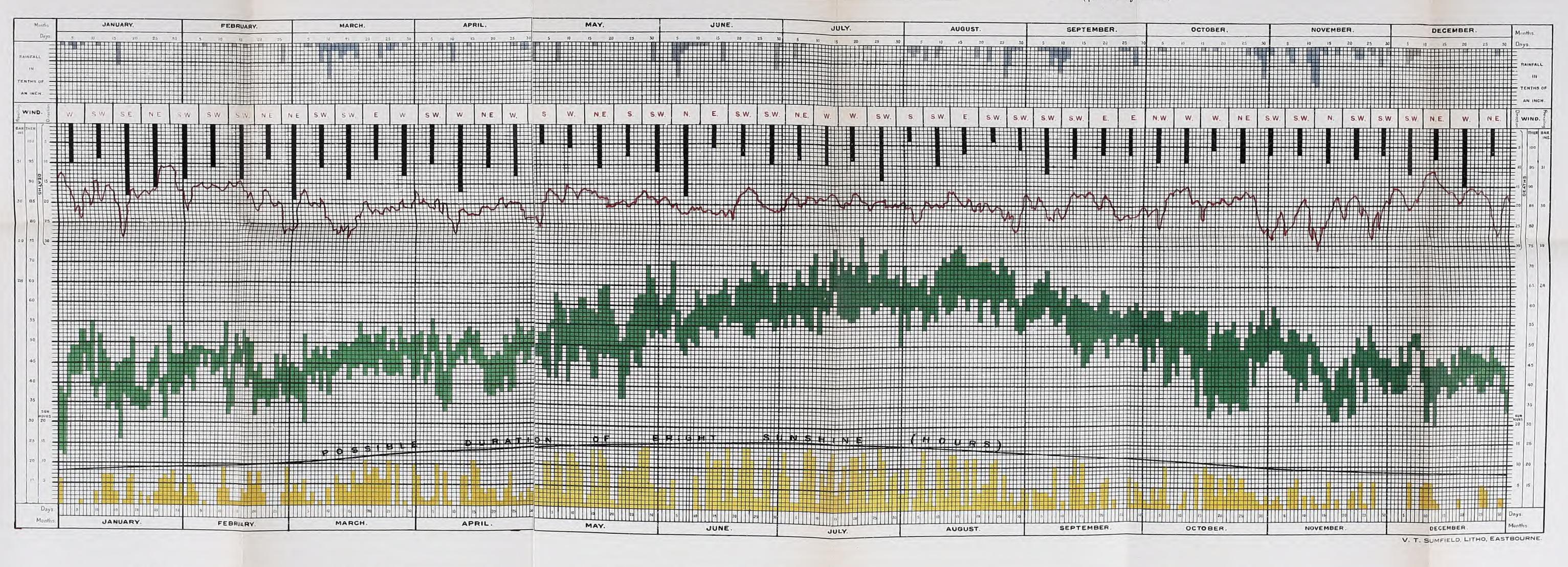




Borough of Lasthourne.

Chart shewing the principal Meteorological Conditions during each day of the year 1905.

[from weekly returns]



TEMPERATURE (Maximum and Minimum.)

EACH SQUARE EQUALS ONE DEGREE

SUNSHINE.

EACH SQUARE EQUALS ONE HOUR

BAROMETRIC PRESSURE (reduced to 32º Fr. and Sea Level)

DEATHS.

RAINFALL.

EACH SQUARE EQUALS ONE TENTH OF AN INCH.

